Brazil: Boosting fossil fuels and the threat of yet another gas pipeline in the Amazon

Of the actions undertaken by the Brazilian government to advance the so-called 'energy transition', one seems particularly ironic, but it's not: increasing the use of 'natural' gas, a fossil fuel. As a strategic pillar of the 'transition', the Energy Research Company (EPE), linked to the federal government, proposes to double gas production in the country by 2034 and to invest up to 140 billion reais (USD 27.6 billion) in infrastructure projects for the sector. (1) Among these projects are 27 transport pipelines that connect different states of the country. One of them stands out for its size and for being located mostly within the Amazon forest. The proposed gas pipeline would connect the municipality of Santo Antônio dos Lopes, in the state of Maranhão, to Barcarena, in the state of Pará; it is expected to be 677 kilometres long and could transform hundreds of kilometers of closed Amazon forest into a large construction site, impacting several communities that live along the proposed pipeline.

Globally, Brazil is a small player in the gas sector: in 2024, it ranked 29th among countries producing this fossil fuel. (2) But why would a country boasting that renewable sources represent 50 percent of its energy mix invest in fossil fuels – and at the same time claim that this will help the country’s energy transition? (3)

Unsurprisingly, the lobbying power of the oil and gas sector is strong, and many companies stand to profit from this boom. In Brazil, part of the exploration, processing and transportation of gas have been privatized in recent years and private companies already dominate a significant part of the entire gas chain - most notably Eneva, the largest private gas operator in the country. (4) Although it is a scenario marked by disputes between different economic groups, there is something that unites them all and the government itself: the discourse of the key role of 'natural' gas as a 'transition fuel'.

The 'natural' in the name helps in creating this false impression; it disguises that what is called ‘natural gas’ is also a fossil fuel and no more or less natural than oil or coal. Moreover, in most cases, oil and gas are in the same deposits and are extracted together. (5) The burning of fossil gas is among the main causes of global warming. The idea of 'energy transition' may be in the discourse of representatives of the fossil fuel sector, but they know it doesn't exist. (6) Eneva's own CEO stated in an interview: "The world has never had a real energy transition; it has had energy additions". (7) Subsequently, however, he reinforces the importance of gas for this supposed transition which, as he himself suggests, will never happen.

As always, those who will pay the price for the expansion of this fossil fuel energy source will be the communities that would be impacted by the construction of gas pipelines, the increase in gas extraction areas, and the boost that this fuel will give to industrialization in the region. An overview of the plans for the gas pipeline that could be built in the Amazon forest provides clues about some of the main private players interested in the booming gas market in Brazil and the impacts it could cause.

The Santo Antônio dos Lopes-Barcarena gas pipeline: there was a forest and many villages along the way

The proposal for the planned gas pipeline to connect the municipality of Santo Antônio dos Lopes, in the state of Maranhão, to Barcarena, in the state of Pará, is not new and has already been proposed along several routes. The most recent proposal is part of the Indicative Plan for Transport Pipelines (PIG), published by the Energy Research Company. (8) This document is an important piece for attracting and guiding the billions of dollars in investments planned for the sector's infrastructure.

According to the document, the gas pipeline would be 677 km long and its installation requires a 20-meter-wide right-of-way. In Maranhão, the route passes through a transition zone between the Amazon forest, Cerrado, and Caatinga biomes. As the route moves towards Pará, the vegetation takes on characteristics of the Amazon forest, which is the predominant biome along the proposed route. The gas pipeline was planned in a region containing conservation units, native vegetation, wetlands, and Indigenous Territories, such as the Alto Rio Guamá, Alto Turiaçu, Awá, and Caru Indigenous Territories.

Image

Most recent proposed route for the gas pipeline, submitted by EPE in 2020

Ninety-eight percent of this route would require opening forest areas currently without any pipeline infrastructure, and approximately 264 km of this new strip would be in an area of intact Amazon forest. The only gas pipeline of similar scale ever built in the Amazon connects the municipalities of Urucu and Coari with the capital of the state of Amazonas, Manaus. Its construction highlights some of the impacts that could be repeated. Dozens of representatives from affected communities denounced the lack of transparency in the process prior to the work, as well as the trail of destruction it left behind. (9) Opening of at least 32 clearings and parallel roads to enable the work in the dense forest; movement of heavy machinery that blocked sources of drinking water used by the communities; clogged tributaries with a drastic reduction in the fish population, among others. This is without even mentioning the population boom in the region's cities driven by the construction and the leaks that have already occurred along this gas pipeline. The local population inherited nothing from the project except its impacts. For many communities, these socio-environmental impacts represent a disruption of their traditional ways of life, resulting in collective and individual traumas that are difficult to overcome.

As for the remaining 2 percent of the route, equivalent to 13 km, it would share the right-of-way with an already existing Norsk Hydro mining pipeline in the state of Pará. In a manifesto against this mining pipeline, published in 2024, Indigenous, Riverside, and Quilombola communities from the Acará Valley denounced the consequences of this type of project. Hundreds of trees uprooted; at least 20 streams devastated by Hydro's "gigantic backhoe" bulldozers to protect and guarantee the project; the installation of power transmission lines to supply the pipeline structures; water contamination and water scarcity and criminalization of leaders who oppose the project. Communities affected by this mining pipeline ask: “Why do we have to pay with our lives, with our culture and with our biodiversity for something that only serves to enrich foreigners and the partners of a company on the other side of the world?” (10)

Image

Construction of Hydro's slurry pipeline for transporting bauxite in the Brazilian Amazon (Photo: IRQ Movement)

In the municipality of Moju, in Pará, the gas pipeline passes less than 3 km from four Quilombola territories. (11) Several Quilombola communities were recognized after the project was drawn up, so this number may be even higher; it is possible that the route will pass straight through some of these territories.

The proposed pipeline route would also cross at least 11 rural settlement projects. (12) The impacts of this are not few. Farmers who lost land to the Urucu-Coari-Manaus gas pipeline, for example, had to give up a 50-meter-wide strip of land on their property. For this, they received a paltry compensation (some received less than 10 thousand reais - USD 2,000 - in 2006) and were prohibited, among others, from carrying out their traditional agricultural practices that involve the use of fire, given that this would pose a risk of explosion. (13) “Nowadays, for us, it is a very big risk because we are surrounded [by the pipelines]. If something happens, no one will escape. No one can use fire to farm there anymore. This hurt us a lot. We used to plant corn, we used to plant mallow, but nobody can do that anymore. Nobody can use fires, the farmer has to clear the land and use fires for that,” laments one of these farmers for whom living with fear has become part of everyday life. (14)

So, what stage is this project at?

The Santo Antônio dos Lopes-Barcarena gas pipeline appears in the Transport Pipeline Indicative Plan (PIG) as “under licensing”. (15) According to this document, it is considered to have this status because the proposed route is similar to the Pará Gas Pipeline, an older project which had already started the regularization process previously. The Pará Gas Pipeline, proposed by a company that is part of the Termogás holding company, even obtained construction authorization from the responsible federal agency. In 2007, it was in the process of environmental licensing, but this process did not move forward. (16) At the time, lobbying for the gas pipeline project was not strong enough to get it off the ground.

The Termogás holding company belongs to Carlos Suarez, known as the “Gas King”. Suarez is one of the main lobbyists for the construction of gas pipelines in the country. (17) Also part of his holding company are Gasmar and Gás do Pará, gas distribution companies in the states of Maranhão and Pará, respectively, which would be connected by the gas pipeline. Over the past two years, both states have enacted controversial laws concentrating the monopoly on gas distribution in the hands of companies connected to the "Gas King" – and of which the states are also shareholders.

Since the impacts of a project of this magnitude extend beyond the mere construction of the pipelines, it is important to consider these broader impacts, too.

The Santo Antônio dos Lopes end, state of Maranhão

The municipality of Santo Antônio dos Lopes is located in the Parnaíba Basin, the second largest onshore basin of 'natural' gas in Brazil, which has been a burden for many surrounding communities. Since 2013, with the first installations of Eneva's thermoelectric plants, for example, the traditional community of Demanda was removed from its territory; 6,000 babaçu palm trees were felled; coconut breakers from traditional communities were unable to maintain their way of life. They lost access the babaçu groves and streams in areas that were privatized, and several farmers were no longer

allowed to work in their territories due to the risk of causing explosions. (18)

Impacts such as these could intensify with the construction of the planned gas pipeline, as this would imply more gas extraction. In addition to the gas pipeline to Barcarena, the Indicative Plan for Transport Gas Pipelines includes three other gas pipelines that would end or start in Santo Antônio dos Lopes. (19)

The company that dominates gas exploration and production in the Parnaíba Basin is Eneva, whose main shareholder is the BTG bank. It holds the concession rights for 15 blocks in the Basin, which together total an area of over 3 million hectares.

Currently, most of the gas extracted from the Parnaíba Basin is used to supply the Parnaíba Thermoelectric Complex, owned by Eneva itself. The surplus is sent by truck mainly to Suzano's pulp mill in the city of Imperatriz, (20) and to the mining company Vale's Pelletizing Plant in the capital of the state of Maranhão, São Luís. Eneva is also investing in what it calls a "green corridor" to supply gas to agribusiness trucks in the Matopiba region (a region encompassing the states of Maranhão, Tocantins, Piauí, and Bahia).

The boost that gas gives to companies like these is one of the pipeline's impacts that are usually not considered. In addition to providing (cheap) energy for these companies, gas allows them to present themselves as 'environmentally responsible' companies that are so demanded by the consumer market. Suzano, one of the world's largest pulp companies, has faced many allegations of deforestation and violation of the rights of communities whose territories it occupies to plant eucalyptus. In fossil gas, the Suzano has yet another ally to present itself as 'positive for the climate'. (21) Vale, whose mines open up giant clearings in the middle of forest areas and whose tailings dam collapses in Mariana and Brumadinho caused an unprecedented death toll and continue to leave a trail of socio-environmental damage, claims that the use of gas moves the company closer to its 'zero carbon' goal. For the agribusiness sector in the Matopiba region, which is characterized by concentration of forested lands, deforestation of the Cerrado and land conflicts, gas opens the possibility to sell its commodities abroad claiming a 'reduction in carbon footprint,' simply because the trucks that transport its grains are fueled by fossil gas. Eneva's largest shareholder, the BTG bank, is providing yet another form of greenwashing. The company operates one of the world's largest carbon offsetting projects through 'reforestation'. Planting trees - often eucalyptus - on lands the company has declared 'degraded', BTG's subsidiary BTG Pactual - sells carbon credits to large multinationals so they can continue polluting and presenting themselves as 'carbon-neutral'. (22)

Almost all the gas currently extracted from the Parnaíba Basin is used up by the industrial activities mentioned above. The construction of the gas pipeline that would connect Santo Antônio dos Lopes to Barcarena would thus depend, in part, on proving that there is more gas to transport, in other words, that the 'probable' gas reserve is indeed there. To that end, by 2028, Eneva intends to drill for gas in 11 blocks; exploration in5 of them as early as 2026. (23) These exploration has already caused impacts. Some of these blocks for which Eneva has already obtained authorization to drill, overlap with at least five Quilombola territories and, in one case, more than 75 percent of the Krenyê Indigenous territory. (24) Recently, after action by the Federal Public Prosecutor's Office, Eneva gave up exploration in part of these blocks. (25)

the lack of confirmation that the gas reserve indeed exists and with no significant surplus of gas to transport, the initial idea of a gas pipeline from the Parnaíba Basin to Barcarena was almost shelved by the government. However, the opening of a liquefied natural gas (LNG) import terminal in Barcarena changed that perspective. The gas pipeline was redesigned to be bidirectional, and the

gas, which could also be sent from Barcarena to the region of Eneva's thermoelectric plants, could serve as a safety measure to guarantee their operation. This kept the pipeline proposal alive, and the proposal remains in the most recent Indicative Plan for Transportation Pipelines, published in 2025.

The Barcarena end, Pará state

The municipality of Barcarena, located in the heart of the Amazon forest, has become a central industrial hub for the expansion of gas production in the northern region of the country. The opening, in 2024, of the region's first LNG Regasification Terminal was greeted with fanfare by local and federal governments who announced a "new energy era", "cleaner and more sustainable". (26)

The terminal belongs to the US company New Fortress Energy (NFE) and receives ships carrying imported liquefied gas for regasification. Currently, this gas has two main destinations: the Novo Tempo Thermoelectric Power Plant and the aluminum factory of Alunorte.

The thermoelectric power plant belongs to NFE itself, but will be operated by its subsidiary Celba. It was installed in Barcarena and is scheduled to be inaugurated sometime in 2026.

As for Alunorte, the largest alumina refinery in the world outside of China, it is a subsidiary of the Norwegian multinational Hydro and uses the same pipeline denounced by the people of the Acará Valley. Refining alumina, the raw material for aluminum, is an energy-intensive industrial activity. By replacing some of the l used by Alunorte with gas, (27) Hydro can charge more on the international market for its 'low carbon alumina and aluminum' and advertise its supposed 'green aluminum'. (28) This, despite Alunorte being involved in conflicts with traditional communities due to the serious socio-environmental impacts caused by its activities. Examples of this include the numerous spills of "red mud," an extremely toxic residue dumped by the company – not to mention the impacts caused by other Hydro subsidiaries in the region. (29)

In addition to the gas pipeline that would connect Barcarena to Santo Antônio dos Lopes, yet another proposed gas pipeline would connect the municipality in Pará state to the state capital, Belém. Injecting more gas into this scenario is to give this predatory industrial hub the breathing room to advance under the guise of greenwashing financed by the use of this fossil fuel.

Communities beware!

The Santo Antônio dos Lopes-Barcarena gas pipeline is still just a preliminary plan, but the interests driving the 'natural' gas sector in Brazil could revive it at any moment under the banner of 'energy transition'. It is important to keep in mind that many of the large 'development' projects planned for the Amazon remained dormant for decades before finally being implemented. This was the case, for example, with the Belo Monte Hydroelectric Plant, (30) with the BR-319 highway and with the Urucu-Coari-Manaus gas pipeline. (31)

Given the expanding gas sector, it's crucial to pay close attention to the next steps the fossil fuel lobby will take, because those most impacted by such projects are usually the last to know. After all, as the people of the Acará Valley said in their manifesto against Hydro's mining pipeline: "Like any invasion, we don't know for sure what they came to do or what damage they will cause. No one even told us how many trees would be uprooted to allow pipes to violate our ancestral land."

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(2) Energy Institute Statistical Review of World Energy 2025.

(3) MME, 2025. Participação brasileira de fontes renováveis é quatro vezes superior à média global, aponta estudo

(4) Most of Brazil's 'natural' gas remains under the control of Petrobras, a mixed-capital state-owned company controlled by the federal government, which is responsible for the largest reserves both offshore – the pre-salt wells – and onshore – the Urucu field. But the private sector has been gaining ground in gas exploration, especially in onshore wells, with Eneva standing out as a leader in the sector: according to company reports, it holds 42 percent of the country's onshore reserves and 67 percent of onshore exploration concessions, operating 14 fields in basins such as the Parnaíba and Amazonas basins. Regarding the gas transportation sector, which was privatized during the governments of Presidents Temer (2016-2018) and Bolsonaro (2019-2022), it is currently mostly private with significant foreign capital participation, especially from Canada and France. Most liquefied natural gas (LNG) regasification terminals are also owned by private companies. For more information see:
Eneva, 2025. Balanço anual 2024.
e EPE, 2024. Plano Decenal de Expansão de Energia.

(5) In 2024: “Of the total natural gas produced in Brazil (offshore and onshore), 91.1% (140 Mm³/day) was obtained from pre-salt wells,” meaning it was extracted in association with oil, and the reinjection of the gas was mainly used “in oil production, to obtain more economically attractive fractions of the product, to the detriment of natural gas, which has a lower commercial value.” EPE, 2024. Plano Decenal de Expansão de Energia.

(6) In a document, OPEC, the largest entity in the oil sector, states: (...) “the history of energy is one of additions, not subtractions. Indeed, the reality today is that the world consumes more wood, oil, coal, gas, in fact, all energies, than ever before. Moreover, energies tend to complement each other – the rise of coal saw the world use more wood; the rise of oil saw the world use more coal; and renewables and electric vehicles require a host of oil products for their development and use”.
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(7) Agência Eixos, 2024. Interview with CEO - Lino Cançado, Eneva | Gas Week 2024

(8) The Santo Antônio dos Lopes-Barcarena Gas Pipeline was presented in more detail in the 2020 Integrated Planning Plan (PIG), but remained included in the most recent PIG, launched in 2025. EPE, 2020. PIG 2020 e EPE, 2025. PIG 2024

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(10) Alma Preta, 2024. Mobilização indígena impede polícia de impor obra de multinacional em território quilombola

(11) According to PIG, the gas pipeline should pass 60 meters from the Quilombola Territories of São Sebastião; 250 meters from Centro Ouro, Nossa Senhora das Graças; 2.8 km from Santa Maria do Traquateua; and 3 km from Santa Luzia do Tracuateua.

(12) The following are listed in the PIG 2020: Alto Boa Vista (Itinga do Maranhão/MA); Passo Livre (Bom Jardim/MA); Rosa Saraiva, Santa Inácia and Faisa (Santa Luzia/MA); Triângulo de Prata (Buriticupu/MA); Mapisa, Raimundo Panelada/Simasa, São Francisco/Boa Viagem (Bom Jesus das Selvas/MA); Floresta Gurupi (Ulianópolis/PA) and Diamantina II (Ipixuna do Pará/PA)

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(14) UFAM, 2018. Atingidos pelo Gasoduto Coari-Manaus: o (re) significado com o lugar

(15) According to PIG, this classification considers "environmental licensing processes for similar projects that share sections or the entirety of the right-of-way and have already expired."

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(19) Two of them are the Santo Antônio dos Lopes/MA – Caucaia/CE Gas Pipeline and the Santo Antônio dos Lopes/MA – São Luís/MA Gas Pipeline, both of which are offshoots of the former Meio-Norte Gas Pipeline project, belonging to TMN Transportadora S.A., another company within the holding company from Termogás. The Meio-Norte project received Construction Authorization No. 360 from the ANP in December 2006, and obtained the Installation License (LI No. 405/2006) from IBAMA in the same year. In 2010, TMN requested the renewal of this environmental license. And the third is the Santo Antônio dos Lopes/MA – Imperatriz/MA Gas Pipeline.

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(24) InfoAmazonia, 2026. Eneva tem autorização para perfurar único bloco de gás ativo em terra indígena na Amazônia Legal

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