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Brazil's "bill of devastation" pushes Amazon towards tipping point



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A <u>bill</u> essentially abolishing Brazil's environmental licensing system is just days away from likely passage by the country's National Congress. Despite the environmental discourse of President Luiz Inácio "Lula" da Silva, what is known as the "bill of devastation" (PL 2159/2021) apparently has his <u>tacit approval</u>. Even if Lula vetoes the bill, anti-environmental voting blocks in the National Congress have more than the 60% in each house needed to override a veto.

The "bill of devastation" was first passed by the Chamber of Deputies on 13 May 2025 by a vote of <u>290 to 115</u>, with President Lula being <u>conspicuously silent</u> rather than supporting his minister of the environment and climate change, Marina Silva, in opposing the bill.

The bill then went to the Senate, where it received amendments that increased its environmental impact even more (!) and passed by a vote of 54 to 13 on 23 May, with President Lula also <u>remaining silent</u>. It has now returned to the Chamber of Deputies, where the president of the chamber plans to put it to a vote in the <u>third week of June</u>.

Progressive weakening

Brazil's licensing system has been progressively weakened since it came into effect in 1986 and since the country's current constitution was adopted in 1988 guaranteeing a right to an "ecologically balanced environment" (see <u>here</u> and <u>here</u>). The <u>impending setbacks</u> in the current bill dwarf previous assaults on the system, including those in the notoriously antienvironmental Jair Bolsonaro presidential administration, and it is happening on President Lula's watch.

The "bill of devastation" has been promoted as relieving "low impact" projects of unnecessary bureaucracy, but it is very much more than this. First, it is for both "low" and "medium" impact projects, two categories that are <u>vaguely defined</u>, allowing projects with major impacts to be benefitted. The bill applies to licensing at both the state and federal levels, and at the state level there is expected to be a "<u>race to the bottom</u>" as states compete to attract investments by loosening environmental restrictions.

The "medium impact" category is a misnomer, as it includes most mining projects such as the mine tailings dams that broke in 2015 at <u>Mariana</u> and in 2019 at <u>Brumadinho</u> to create two of Brazil's worst environmental disasters, both killing human residents downhill from the dams and destroying biodiversity in one of Brazil's great rivers (the Rio Doce) and in the river's estuary.

Under the bill these "low" and "medium" impact projects would be licensed by what is known as "self-licensing," officially called a "License by Adhesion and Commitment" ("Licença por Adesão e Compromisso," or LAC). This <u>eliminates</u> the need for an environmental impact assessment, public hearings, specification of compensatory measures in the event of accidents or other impacts, and any technical review by environmental authorities. Basically, this self-declared statement consists of checking a series of boxes on an online form. The bill as amended also <u>eliminates key legal</u> restrictions on deforestation in Brazil's Atlantic Forest, which is already a highly threatened ecosystem.

Bypassing any public or committee debate, at the last minute before the Senate's plenary vote the bill was <u>modified with an amendment</u> that increased its environmental impact enormously. The amendment created a "Special Environmental License" (Licença Ambiental Especial, or LAE) that would allow any project considered to be "strategic" to have an accelerated approval process regardless of the magnitude of its impacts.

The licensing agency would have a one-year deadline for approving the project, after which the license would be automatically approved. The perennial staff shortages at IBAMA make this likely to be a frequent occurrence. Definition of what projects are "strategic" would be done by a council representing political interests.

The amendment is believed to be <u>specifically intended</u> to facilitate the controversial mouth-of-the-Amazon oil project, which has major potential impacts both from potentially <u>uncontrollable oil spills</u> and from its <u>impact on climate change</u>. The amendment was introduced by Senate president Davi Alocumbre, who represents Amapá, the state that expects a financial bonanza from the adjacent mouth-of-the-Amazon offshore oilfields that are awaiting an environmental license. He also has great <u>influence</u> <u>on President Lula</u> due to his stranglehold on approval of legislation by the Senate.

The new mechanism for "strategic" projects is also expected to benefit other high-impact initiatives, such as rebuilding the <u>BR-319 highway</u> that, together with its planned side roads, would open roughly half of what remains of Brazil's Amazon forest to the <u>entry of deforesters</u>. A list of large <u>hydroelectric dams</u> desired by the Ministry of Mines and Energy is also awaiting a route to environmental approval.

Brazil's imminent climate disaster

Global climate and the Amazon forest are both approaching tipping points where the process of collapse escapes from human control. These imminent disasters are intertwined: if the Amazon forest were to collapse it would release more than enough greenhouse gases to push global temperatures beyond the point where human society loses the option to contain climate change by cutting emissions to zero, and if global temperatures rise uncontrollably, it would soon push the Amazon forest to collapse. The Amazon forest is on the verge of tipping points in terms of temperature, the ongoing increase in dry season length, the percentage of forest cleared and a combination of various climatic and direct anthropogenic impacts.

The loss of the Amazon forest that would result from crossing any of these tipping points would, among other impacts, sacrifice the forest's vital role in <u>recycling water</u>. A volume of water greater than the Amazon River's total flow is released as water vapor by the leaves of the trees, providing rainfall that not only maintains Amazon forest but also maintains

agriculture and city water supplies in other parts of Brazil and in neighboring countries. The water vapor is transported by winds known as "flying rivers" to São Paulo, the World's fourth largest city, which depends on this water supply. Major droughts in São Paulo, such as those in 2014 and 2021 are increasing due to changes in ocean temperatures linked to global warming, and this trend is <u>expected to increase</u>. In the hydrographic basin that includes São Paulo the percentage of the annual rainfall coming from the Amazon forest has been estimated at <u>16%</u>, <u>18-23%</u>, <u>23%</u> and <u>70%</u>. Even the lowest of these estimates implies that, without the Amazon forest, in a year like 2014 São Paulo would run out of water.

A "runaway greenhouse" would be catastrophic for Brazil. The frequency of major droughts would increase by at least <u>ten times</u> the historical average. Brazil's <u>semi-arid</u> <u>Northeast Region</u> would become a <u>desert</u>, presumably expelling the tens of millions of people there who depend on agriculture. Family agriculture and agribusiness throughout the country would be <u>heavily impacted</u>. <u>Sea-level rise</u> and <u>increased storms</u> would impact the large population living along Brazil's Atlantic coast. "<u>Climate surprises</u>" not foreseen in climatic models, such as the <u>2024 floods</u> in the state of Rio Grande do Sul, would become more frequent.

Amazon destruction with government support

Given these catastrophic prospects, Brazil's government should be acting decisively to halt the country's greenhouse gas emissions and to lead the World in combatting climate change. These necessities are interrelated, as effective leadership is done through example and Brazil cannot continue to merely exhort other countries to reduce their emissions when its domestic decisions are <u>acting to increase global warming</u>. This <u>includes the "bill</u> <u>of devastation"</u> and a series of government actions that increase current emissions and initiate processes that will continue to emit large amounts for decades to come.

Brazil's Ministry of Environment and Climate Change is doing good work to repress deforestation through command and control, but essentially all the rest of the government is acting to increase emissions. The Ministry of Transportation is pushing to rebuild the BR-319 highway with support from President Lula (see <u>here</u>, <u>here</u> and <u>here</u>). The Ministry of Agriculture is subsidizing soybeans and the pasture conversion to soy, which is one of the <u>major drivers of deforestation</u> as the cattle ranchers who sell their land to soy planters (including land outside of the Amazon) use the money from these lucrative sales to <u>purchase and deforest</u> much larger areas of cheap rainforest land in the Amazon. This is often portrayed as implanting high-production agriculture on degraded land and also has <u>Lula's support</u>. The land-tenure agency (INCRA) legalizes illegal occupations and land claims in government land (which goes by the euphemism "regularization"), thus providing a never-ending stimulus for more invasions and land grabbing (see <u>here, here</u> and <u>here</u>). President Lula has declared his intention to <u>create a</u> <u>"shelf"</u> of undesignated government land ("terras devolutas") for distribution in this way.

Oil to be extracted "to the last drop"

Rapidly phasing out fossil fuel use is fundamental to containing global warming. The amount by which human society must reduce its emissions and the trajectory in time that this reduction must follow are determined by analysis of the best available data and climate models. The "<u>Global Stocktake</u>" by the Climate Convention, released at COP-28 in 2023, showed that anthropogenic emissions must decline by 43% by 2030 compared to 2023, and by 84% by 2050 to stay within the limit currently agreed under the Paris Agreement of 1.5 °C above the pre-industrial average global temperature. This limit represents a <u>tipping point</u> both for the <u>global climate</u> system and for the <u>Amazon forest</u>. Above this point there is a sharp increase in the annual probability of uncontrollable feedbacks driving the system to a catastrophic shift or collapse.

Passing a tipping point does not mean that the associated catastrophe happens immediately, as in the popular perception of it being like stepping off the edge of a cliff, but the cumulative probability of the associated catastrophic event occurring increases rapidly over the span of a few years. The average global temperature has now been over the 1.5-°C mark for more than a year, and <u>recent research</u> indicates that the current trend pushes the long-term average above this limit <u>sooner than we thought</u>. The year with the highest average temperature in recorded history was 2024, and the World Meteorological Organization predicts that by 2029 there is an <u>80% chance</u> that at least one year will exceed that record.

We are all accustomed to negotiations seeking middle ground in politics, diplomacy and commercial transactions, but the numbers for needed reductions in global emissions are not subject to negotiation. They are simply fixed unless someone does a scientific study showing that they should be different. Fossil fuel use needs to be curtailed now – it cannot wait for Trump to leave the scene, current wars and geopolitical crises to be settled, etc. Unfortunately, Brazil's actions and policies are on the wrong side of this question. Lula's minister of mines and energy states that the Brazil will continue to extract petroleum until it becomes a rich country. With reference to the mouth-of-the-Amazon project, President Lula has stated that he will not "throw away any opportunity for the country to grow".

Since Brazil will always want to grow, this implies a license to extract petroleum forever. Petrobras (the Brazilian government oil company) has stated that the company plans to be major oil exporters in 2050 and beyond (see <u>here</u>, <u>here</u> and <u>here</u>). The mouth-of-the-Amazon project is critical. A massive auction of drilling rights, both onshore and offshore, is scheduled for 17 June, including <u>47 blocks</u> in the mouth of the Amazon River. Environmental approval of the first "experimental" well (FZA-M-59) is <u>viewed as the key</u> to international oil companies being willing to bid on these blocks. The head of the licensing agency (IBAMA) has been under intense pressure to approve the project, and on 19 May he <u>overrode</u> the <u>formal opinions</u> of the agency's <u>technical staff</u> to allow the project to move towards approval. The licensing involves the environmental risks of potential oil spills rather than the fundamental question of whether new oilfields should be initiated at all in light of the implications for global climate.

Amendment without debate will favor oil project in Amazonas

Within the licensing debate, the focus is almost entirely on whether Petrobras has the infrastructure and personnel to mount a rescue operation for marine wildlife in the event of an oil spill, rather than the more basic question of whether a leak could be plugged if it should occur. Unfortunately, there are strong indications that a leak could not be plugged for months or years, as the site has double the 1.5-km water depth at the Deepwater Horizon well in the Gulf of Mexico that spilled uncontrollably for five months, and the ocean currents are much stronger and more complex in the mouth of the Amazon. The 2010 Deepwater Horizon accident showed that no one in the World had the technology to plug a leak at a depth of 1.5 km, much less at double that depth. Petrobras constantly brags about its long experience with offshore oil extraction, but neither Petrobras nor any other company has plugged a leak at a location with the depth and complexity of the mouth-of-the-Amazon site. The frequency of reported incidents such as blowouts, injuries, and oil spills in offshore oil production is known to have a strong positive correlation with increasing water depth. Petrobras has had a series of recent offshore accidents, including a major fire on a drilling platform in April 2025, and it is the company that holds Brazil's record for the number of environmental fines received.

Containing global warming is inconsistent with opening new oil fields due to the economic logic of these projects, which is different from the economics of continued extraction of existing oilfields. This is what led the International Energy Agency (IEA) to <u>recommend</u> that no new oil or gas fields be opened anywhere in the World. In the case of the mouth of the Amazon project, the expectation is that it would take five years to begin commercial production and another five years to pay for the investment; since no one will want to stop with zero profit, the project implies extracting petroleum for many years after that – far beyond the time when the World must stop using oil as fuel.

<u>Petrobras claims</u> that the mouth-of-the-Amazon project and other planned new oilfields are needed for Brazil's "energy security" to guarantee that Brazilians will not lack fuel for

their vehicles. The falsity of this argument is obvious from the fact that Brazil currently exports <u>over half</u> of the oil it extracts, and this percentage is expected to rise with the planned expansion. The reserves in Brazil's existing oilfields are far greater than what the country can consume before fossil-fuel use must cease. In other words, the expansion of oil extraction is purely a matter of money. Ironically, Brazil's finance ministry <u>suggested</u> that the R\$20 billion (US\$ 3.4 billion) expected to be collected from the upcoming 17 June auction of drilling rights would "loosen" the county's budget squeeze and allow pending parliamentary amendments to be paid.

Another argument promoted by Petrobras and by President Lula is that the oil revenue is needed to <u>pay for Brazil's energy transition</u>. While the energy transition must indeed be paid for, it should have a guaranteed place in Brazil annual budget, like health and education, and not be treated as something optional that depends on windfall financial gains. In addition to the <u>obvious irony</u> of justifying oil projects on the basis of an energy transition, only an insignificant percentage (0.06%) of the government's revenue from oil was used for projects linked to the energy transition in the 2018-2025 period. The energy transition must take place now, not several years in the future when the new oilfields are producing.

President Lula's sleepwalk

President Lula apparently <u>lacks understanding</u> of Brazil's suicidal course towards a climate catastrophe. He has surrounded himself with proponents of projects with enormous climatic consequences, such as his minister of transportation who presses for Highway BR-319 and his minister of mines and energy and the president of Petrobras who push for the mouth-of-the-Amazon and other new oil and gas projects. Clearly, he does not listen to his minister of environment and climate change on these issues. Lula lives in a "<u>disinformation</u> <u>space</u>," to use the term coined by Ukrainian President Volodymyr Zelinski to describe Donald Trump. The question of whether President Lula will awake from his sleepwalk before COP-30 in November is critical, as this is his opportunity to <u>assume global</u> <u>leadership</u> on climate change. Although there is no indication that this is likely, efforts to penetrate his disinformation space must continue.

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