



Energy that cleans the forest off the map

WRM Bulletin 279

July 2026

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OUR VIEWPOINT

The direct link between energy and deforestation in capitalism

Forest-dependent Peoples in many countries are facing the destruction of their territories in the name of 'clean energy' and the 'energy transition'. These Peoples also continue to face devastation caused by the production of today's main source of energy: fossil fuels. This reality shows that 'clean energy' and the 'energy transition' only exist on paper.

The race to produce energy has left large scars in forests, particularly across the Global South. The companies that produce energy on a large scale, with the aim to meet the insatiable demands of corporate capitalism, raze everything in their path. Whether the energy produced comes from fossil fuels or supposedly 'clean energy' sources for the so-called 'energy transition' makes no difference to the People whose territories are sacrificed in the name of 'energy security'. All of these forms of industrial energy production are synonymous with the destruction of forest Peoples' ways of life. Industrial energy production leaves behind a trail of devastation and conflict. As the past 200 years have shown very clearly, energy production will always be destructive under a capitalist paradigm.

Cheap and continuously available energy is fundamental in order to power capitalism. This energy powers the factories, industrial machines, warplanes, and bulldozers that tear down forests to make way for more factories and infrastructure – which in turn need more energy. Wars continue to be fought over the control of energy sources, especially oil.

One characteristic that distinguishes capitalist societies from others with which they share the world is an insatiable greed for accumulation and 'growth'. Fossil fuels are the energy source that matches this capitalist greed almost perfectly. The abundance of fossil fuels and their combustion power has allowed capitalist societies to grow and continue to use ever more energy. As the ecological and societal consequences of this insatiable greed reach crisis levels, the fossil fuel industry has sold the idea that a transition is underway, and that this transition will lead the world to stop using fossil fuels and replace them with 'clean energy' sources. This is a dangerous illusion, and the fossil fuel industry is fully aware that the promise of said 'transition' is largely an empty marketing ploy; the so-called 'energy transition' – that is, the idea of gradually ceasing to burn fossil fuels – does not exist in capitalism. (1)

The data speaks for itself. Fossil fuels still account for 87 percent of the energy used worldwide, and their use continues to increase (2). The world's largest banks continue to provide massive financing to the fossil fuel industry. Since the Paris Agreement - the UN treaty in which signatory governments pledged to reduce greenhouse gas emissions - came into force in 2016, big banks have provided a staggering USD 8.7 trillion in financing to the fossil fuel sector. In 2025 alone, banks allocated USD 906 billion to companies in this sector, an increase as compared to the previous year. (3)

The so-called 'clean energy' produced under the logic of capitalism will also always be tainted by destruction. Hydroelectric dams submerge forests, alter the course and ecosystems of rivers and make it impossible for people to continue living their traditional ways of life. Countless trees are felled and forests devastated to produce the blades that move ever larger wind turbines. Mining activities to

extract raw materials for solar power panels, electric car batteries, and other products associated with 'green energy' and the 'energy transition' creep further into forests.

The green facade used to justify the search for these raw materials also serves as a shield for governments and corporations to move forward with their destructive activities. The global race for strategic minerals, while presented as a race toward the 'energy transition', holds its dirty secrets. It provides cover for an arms race that has been accelerating and expanding. A large portion of the minerals used for the 'energy transition' are also essential for the military industry. According to World Bank estimates, between 2020 and 2050, 3 billion tons of minerals and metals would need to be extracted for the so-called 'energy transition'. This represents a 500 percent increase in demand for certain minerals (such as graphite, lithium, and cobalt) and a projected investment of USD 1.7 trillion. But what the World Bank has failed to mention is that 47 percent of these minerals would be used in activities unrelated to the 'energy transition' – and instead, for example, to develop military technologies. (4) The wake of destruction that mining of this magnitude would leave in territories is difficult to even fathom.

WRM's Bulletin 275 debated the very idea of what 'energy' is, and it shared stories from communities with worldviews that differ from the capitalist worldview. These communities spoke of other concepts and kinds of energy that are not destructive. (5) This current Bulletin presents articles about capitalist energy projects that inflict wounds on forests and forest-dependent Peoples. The stories provide further evidence that the so-called 'energy transition' and the concept of 'clean energy' are built on lies; that 'clean energy' production involves large amounts of fossil fuels no matter what; and that the territories of communities in the Global South are sacrificed for this alleged 'transition'. As long as capitalism exists, energy production will inevitably be linked to social and environmental collapse.

The first article of this bulletin provides an overview of the impacts of oil and gas production on forest areas and several communities in the Niger Delta, Nigeria. This environmentally and culturally rich region is also home to one of Africa's largest oil reserves. In recent decades, numerous accidents related to fossil fuel extraction led to strong community mobilization against industry giants such as Shell.

The second article provides an overview of the impacts of mining of (not so) rare earth elements in the Mekong region. The Mekong region is one of the areas most affected by mining exploitation – largely driven by the search for raw materials for 'clean energy' production. The destruction and contamination this mining inflicts on communities along the Mekong and its tributaries raises the poignant question: "Green transition for whom?"

A third article discusses the impacts of an energy project that is presented as 'clean,' but which represents a severe threat to the Shuar People and their territory in Ecuador. The Santiago hydroelectric dam, designed to be the largest dam in the country, is being built in the southern Ecuadorian Amazon. The project would flood 3,000 hectares of mostly native vegetation, and it would affect more than 91,000 people. The Yuquianza and La Unión communities of the Shuar People may be entirely submerged, and their ancestral territory destroyed.

The fourth article provides an overview of current energy projects in Southeast Asia. Many of these projects are promoted in the name of the 'energy transition'; yet they are extremely destructive to the forest and the People living in and with these forests. The article also points to the perversity of forest conservation programs, which systematically ignore the large-scale forest destruction caused by energy-related projects; meanwhile, such conservation programs place the blame for forest destruction on the communities that depend on forests and use them in traditional ways.

Finally, this bulletin includes a warning about the risks of large government investments in gas production and related infrastructure. Such investments, slated to occur over the coming years, would benefit private interests in the name of the so-called 'energy transition'. The article explains how the Brazilian government, in particular, is promoting this kind of fossil fuel extraction; it plans to build a gas pipeline that would impact hundreds of kilometers of Amazon rainforest and numerous communities along its path.

Enjoy your reading!

References:

- (1) OPEC, 2025. [World Oil Outlook](#)
- (2) [Energy Institute Statistical Review of World Energy 2025](#)
- (3) BOCC, 2026. [Banking on Climate Chaos: Fossil Fuel Finance Report 2026](#)
- (4) Oakland Institute, 2025. [Climatewash - the World Bank's fresh offensive on land rights](#)
- (5) WRM, 2025. [Energy in debate](#)

Oil took our forests: Deforestation and the Niger Delta

An overview of the links between oil and gas extraction in the Niger Delta and deforestation and major oil spills that have occurred over recent decades in one of Africa's leading oil-producing regions. Their impact on a region of immeasurable environmental and cultural wealth has led many communities in Nigeria to fight against oil giants such as Shell.

The Niger Delta, in Nigeria, is rich in petroleum resources with the first commercially viable oil well drilled there in 1956. The region hosts the second largest petroleum reserves in Africa, with the Nigerian economy heavily dependent on the industry. And that's exactly where one of the most ecologically diverse regions on Earth is located. It is also home to more than 30 million people from more than 40 ethnic nationalities. Most of them depend on farming and fishing for their livelihoods and food security, as well as their cultural identity and well-being. Deforestation in connection with activities of oil companies poses acute threats to both the environment and people.

For forest-dependent Peoples of the Niger Delta, oil has not only stolen their forests but their foods, lives, livelihoods, dignity and culture. This region has the most extensive mangrove forests in Africa and the fourth largest in the world. Mangroves play critical roles in shoreline protection, water purification, climate regulation and livelihood support. They provide resources for construction, food and are reservoirs of biodiversity. More than 60 per cent of commercial fish in the Gulf of Guinea breed in the Niger Delta mangroves. Unfortunately, about 40 per cent of the mangrove in the Niger Delta has been lost primarily due to oil and gas exploitation. Furthermore, 27 per cent of mangroves potentially threatened by oil spills globally are found in the Niger Delta. (1)

An aerial view of the Niger Delta shows a region criss-crossed by lines that heavily fragment the forests, making room for additional deforestation by loggers, poachers, miners and other forest resource harvesters. Generally, tropical forests in Nigeria run from the coast to between 150 and 200 kilometres inland from the Atlantic coast. The Niger Delta is a huge fan-shaped region in Nigeria fed by deposits from two major rivers, (the River Niger and the River Benue) and emptying into the Atlantic Ocean. The natural vegetation here is the tropical rainforest with thick and lush canopies.

All stages of oil and gas extraction processes directly impact the forests of the Niger Delta. At the exploratory stage, seismic lines are cut through the forests and even more deforestation occurs when pipelines are being laid. Although seismic lines are temporary and the environment could recover after the completion of the survey, mangrove forests can remain damaged for decades as the lines remain open after clearing. The oil companies are fully aware of the deforestation caused by their activities. A Shell fact book highlights the “visibility of seismic line cutting on the mangrove swamp... It is the aerial roots that are subject to most of the cutting. Recovery of the cut roots takes 2-3 years, but re-growth of mangrove trees, to make the seismic line indistinguishable from the uncut areas, may take 30 years or more”. (2)

It is estimated that there is between 5,000 to 7,000 km of pipeline networks in the region. Considering that these pipelines have at least 100 metres right of way, the extent of the deforestation associated with these pipelines is enormous. Added to these major pipelines are smaller flow lines that connect the oil wells and that equally impact the territory.

In addition to the pipelines, there are canals built by oil companies for the movement of their equipment inland. There are other canals constructed to transport process water and other wastes from oil flow stations to rivers and to the ocean. Roads built to access oil wells, flow stations and other locations further slash through the forests of the Niger Delta. These infrastructural developments are often accompanied by dredging and sometimes sand filling of swamps and other wetlands. Dumped dredging materials alter the topography and hydrology of affected areas and impeded the recovery of deforested areas.

Oil companies also use poorly constructed waste dump sites in the forests that further deepen the forest cover losses.

Forests on Fire (and Pollution Stories)

The level of pollution from oil extraction and processing is estimated to be equivalent to more than 13 million barrels of crude oil (more than 2 billion litres), causing enormous damage to the environment and posing severe health threats to the people who live in the region. Unsurprisingly, the region holds the dubious record of being one of the top ten most polluted places in the world.

Besides the oil spills, routine gas flaring equally impacts the forests of the Niger Delta through stunting of tree growth and overall poisoning of the ecosystems. The flares cause acid rain and acidification of soils and water bodies. They alter local ecological conditions including damaging the vegetation and forests, contributing to climate change, which further stresses coastal ecosystems.

Oil pollution is a major cause of mangrove forest destruction in the Niger Delta. The unregulated and destructive harvesting, conversion of mangrove covered areas into agricultural land or built-up zones, such as for housing or industrialization are also contributory factors.

The problem of oil spills in the Niger Delta has been described in several reports. (3) One of them, the United Nations Environment Programme report on the Environmental Assessment of Ogoniland of 2011, found contaminated soil and groundwater; pollution of vegetation such as mangroves; aquatic contamination resulting, among other things, in a decrease in fish; communities exposed to petroleum hydrocarbons in outdoor air and drinking water, sometimes at elevated concentrations, and also exposed through dermal contact with soil and sediments. In the community of Ejama-Ebubu, the study found heavy contamination present 40 years after an oil spill occurred, despite repeated clean-up attempts of dubious quality.

Spills happen due to a variety of reasons, for example due to corrosion of pipelines and operational and equipment failures. For example, in the Bodo Creek area, more than 1,000 hectares of mangrove forest were degraded by two major operational oil spills in 2008 and 2009 and subsequently reinforced by several spills due to pipeline breakage.

In January 1998, 40,000 barrels of crude oil (more than 6 million liters) was spilled by the oil company Mobil at their Idoho offshore production platform. Some of that oil evaporated, but the impact of the spill spread beyond the borders of Nigeria, reaching Benin Republic and causing harm to coastal communities along that stretch.

There was an offshore oil spill at Shell's Bonga platform in December 2011. Shell and the Nigerian government announced that 40,000 barrels of crude oil was dumped into the Atlantic Ocean. At the Idoho platform incident the volume of oil spilled was also said to be 40,000 barrels. That appears to be

a comfortable measure of ecological abuse by the oil companies. The Bonga spill affected 20 coastal communities in three states of the Niger Delta. (4)

One of the largest oil spills in Nigeria was the Funima Well 5 offshore well blowout in January 1980 with a spill of at least 200,000 barrels of oil (almost 32 million litres) into the Atlantic Ocean and causing damage to 340 hectares of mangrove forest.

In 2004, Nigerian Liquefied Natural Gas pipeline transversing through Kala-Akama, Okrika mangrove forest leaked and caught fire, and devastated and estimated 27 km² of the mangrove forest. Repeated contamination from aged pipelines and abandoned but not decommissioned wells repeatedly contaminate recovering mangrove forests.

In more recent years, massive deforestation and ecological harms have been caused by blowout of poorly maintained, abandoned or derelict oil wells. In November 2021, for example, there was a wellhead blowout at Well 1 of the Oil Mineral Lease 29 on Santa Barbara River.(5) Crude oil was spewed into the river and neighbouring mangrove forests for six weeks. The official estimate of the volume of crude oil spewed into the environment was put at 3,000 barrels, whereas experts estimate a release of at least 500,000 barrels of crude oil (more than 79 million litres). The incident left a trail of suffocated and dead mangroves besides the general devastated ecosystem. The wide disparity between official and independent figures of the volume of crude oil dumped into the environment raises questions about accountability in the handling of serious issues impacting oil field communities.

The mode of handling oil spills has also exacerbated ecological impacts of production. Forests have been incinerated by fires set on crude oil by oil company contractors who are not competent in oil spill clean-up. This happened at Aleibiri forest in Ekeremor Local Government Area in Bayelsa State in March 1998 and another in Foutorogbene Community in August of the same year that Shell's contractors sought to cover the evidence of a major oil spill by setting the forest on fire. (6)

Another factor that contributes to widespread deforestation in the Niger Delta is oil theft. It is generally agreed that the operation is at industrial scale and includes crude stolen for export and some stolen for bush or artisanal refining. Bush refining requires clearing of large areas of forests and dumps crude oil into the environment in an uncontrolled manner. The stealing process sometimes involves clandestinely breaking of pipelines and leaving them to keep leaking crude into the environment because of poor equipment handling.

A remote-sensing study, "Mapping Impacts of Crude Oil theft and Illegal Refineries on Mangroves of the Niger Delta of Nigeria with Remote Sensing Technology", found that distressed mangrove vegetation associated with illegal or unauthorised refining activities covered an approximately 37.6 km² area.

Assault on the Deltas

Hundreds of thousands of Niger Delta residents have suffered from the impacts in the almost seven decades since oil was discovered in the region. Two crude oil spill fire deforestation incidents deserve to be mentioned here: those in Goi and Bodo. Shell was successfully challenged in courts in The Netherlands and the United Kingdom by the impacted communities over both incidents.

One spill from a Shell facility affected Goi community in Ogoniland, Nigeria, in 2004. The community and the adjoining mangrove forest caught fire, sacking the entire community. The impacts were so extreme that the residents of Goi left their homes and evacuate the community. 'We were eating,

drinking, breathing the oil,' said Eric Dooh to The Guardian. Nearly 20 years after the spill, he returned to visit the community, which remained deserted, with decimated biodiversity. (7)

The second community is Bodo, also in Ogoniland. A 2008 major oil spill there destroyed vast areas of mangrove forests. These oil spills destroy the lives of the impacted communities. Water contamination makes fishing impossible – the main livelihood for many of these communities –, prevents them from accessing safe drinking water, and even their lands are contaminated, often making it impossible for them to farm. (8)

In both Goi and Bodo, an official sign warns: “Public Notice, PROHIBITION! Contaminated Area, Please Keep Off” (see picture).

The deforestation of the Niger Delta has gained notoriety mostly by the accompanying oil pollution and gas flaring. The region should be a cautionary tale to other regions where the drive for petrodollars continues to sideline care for people and the planet. This is particularly disturbing in Africa where there appears to be a coordinated assault on world heritage and other protected areas. The flash points include Virunga National Park in the Democratic Republic of Congo, Okavango Delta in Namibia/Botswana, the Saloum Delta in Senegal – all of them UNESCO World Heritage Sites – and Murchison Falls National Park in Uganda.

But resistance to this destruction has been woven for a long time. In an article previously published in the WRM Bulletin, Ken Saro-Wiwa, a leader of the Movement for the Survival of the Ogoni People (MOSOP) warned about the long-term impact of the destruction of Ogoniland by oil companies. He described the environment in his community of Ogoni as having been “completely devastated by three decades of reckless oil exploitation or ecological warfare by Shell.... An ecological war is highly lethal, the more so as it is unconventional. It is omniscidal in effect. Human life, flora, fauna, the air, fall at its feet, and finally, the land itself dies.” Ken Saro-Wiwa was ‘legally’ assassinated by hanging, in November 1995. His message is as strong as ever. (9)

The struggle to reforest and reclaim the forests is ongoing with community women leading the charge by raising nurseries of mangroves and replanting in degraded portions. Despite the huge harms wreaked on the Niger Delta forests, the people have not given up hope.

Nnimmo Bassey, Health of Mother Earth Foundation, Nigeria.

References:

- (1) ScienceDirect, 2020. **A Review of the Threat of Oil Exploitation to Mangrove Ecosystems: Insights from the Niger Delta, Nigeria.**
- (2) **Environmental Rights Action (ERA) -The Human Ecosystem of the Niger Delta, 1998. Benin City.**
- (3) UNEP, 2011. Environmental Assessment of Ogoniland; BSOEC, 2023. An Environmental Genocide: Counting the human and environmental cost of oil in Bayelsa, Nigeria.
- (4) WRM, 2008. **Oil, Environment and Disaster Economics.**
- (5) Wellhead Woes, 2021. Health of Mother Earth Foundation.
- (6) ERA, FoEn, 2009. Knee Deep in Crude. Benin.
- (7) The Guardian, 2022. **The village that stood up to big oil – and won**
- (8) **BBC, Shell agrees \$84m deal over Niger Delta oil spill**
- (9) WRM, 2002. **Nigeria: Godforsaken by oil.**

'Rare Earths' and the new geography of sacrifice in Mekong region

What is being promoted globally as 'clean energy' is revealing expanding frontiers of mineral extraction shaped by conflict and cross-border tensions. In the Mekong and Salween basins, mining activities are destroying forests and polluting rivers and watersheds, particularly in Myanmar, one of the world's most important exporters of heavy 'rare earth' minerals.

In mid-February 2026, during an exchange at Chiang Mai University in northern Thailand on the growing cross-border impacts of 'rare earth' mining, an elderly villager from the Kok River basin, who had remained silent for most of the discussion, slowly raised his hand after listening to explanations about mining activities expanding across the border in Myanmar. He then asked: "So what exactly are 'rare earths'? And what is really the problem with them?"

It was an ordinary question. Yet it reflected something much larger now unfolding across the Mekong region, the Salween basin, and Southeast Asia, even as the impacts had already begun entering people's everyday lives, many communities living far from the mines still did not fully understand how they had become connected to them.

'Rare earths' are not 'rare' in the way their name suggests. Many of these elements are found across the Earth's crust. What makes them valuable is not simply their existence, but the difficulty of finding them in forms and concentrations that can be mined profitably, especially heavy 'rare earths'. The term describes a group of 17 minerals that have become central to the so-called green energy transition increasingly promoted by governments and corporations around the world. These highly valuable minerals are essential components of electric vehicles, wind turbines, smartphones, and military technologies.

But for people living along rivers in Myanmar, Thailand, Laos, and elsewhere across the Mekong and Salween basins, 'rare earths' are coming to mean the exact opposite of what the words 'clean' and 'green' promise.

Instead, they increasingly mean rivers contaminated by mining waste, forests and mountain landscapes carved up for extraction, rising living costs, food chains filled with toxic substances, and the growing possibility of displacement and losses that may never be recovered.

These transformations may be among the most politically sensitive the region has experienced since forests, rivers, and territories in the Mekong–Salween region were increasingly drawn into expanding markets and extractive economies during the wave of market liberalization in the late 1980s.

Perhaps this was also what lay behind the elderly villager's question that morning. Although communities in the Kok River basin are already living with the consequences of 'rare earth' extraction, especially through polluted rivers and growing uncertainty around forests, water, and livelihoods, it is not always easy to connect the dots between a mineral promoted as essential for 'clean energy' and the impacts unfolding far beyond the mines themselves. 'Rare earth' mining sites may be located across borders and far from the communities they affect, yet their impacts continue to travel downstream, quietly linking rivers, territories, and people into the same chain of extraction.

‘Rare Earth’ Mining: Extraction That Cannot Be Separated from Power and Money

“Those mountains used to be green before the mining began. Now those mountains are ugly. The rivers have turned red. Some of the chemicals used in the mining pits are simply dumped into the water.”

— Seng Li, human rights campaigner and researcher of mining activities in northern Myanmar (1)

Research findings and satellite imagery show that there are now more than 2,400 mining sites across Southeast Asia (2), revealing devastated landscapes where forests once stood and rivers increasingly burdened by pollution. In the Mekong and Salween basins alone, more than 540 mines have been identified, creating serious risks for surrounding watersheds, especially in Myanmar, where mining activities are closely connected to the Mekong, Salween, and Irrawaddy river systems.

Over the past two decades, northern Myanmar has become one of the world’s most important sources of heavy ‘rare earth’ minerals (3). Although mineral exploration had begun long before, industrial-scale ‘rare earth’ mining first appeared along the China–Myanmar border in Kachin State in the early 2010s and expanded rapidly after 2015, when China tightened domestic environmental regulations and began seeking new sources along its southern border.

Following Myanmar’s military coup in 2021, both Kachin and Shan States emerged as some of the most important, and least regulated, sources of heavy ‘rare earth’ minerals in the world.

For Kachin, ‘rare earth’ mining did not arrive in empty territory. It entered landscapes already shaped by decades of jade, gold, amber, and cross-border mineral trade. Roads had already been carved through mountains. Armed groups had already built taxation systems. Brokers, traders, checkpoints, and extraction economies had already become part of everyday life.

‘Rare earths’ did not create this frontier. They simply found a territory already prepared for another cycle of extraction.

‘Rare earth’ mining has also increasingly become a driver of deforestation, particularly in northern Myanmar. This is especially alarming in places such as Kachin State, long known not only for jade and mineral wealth but also for its forests and river systems that give rise to the Irrawaddy River. Extraction frontiers continue expanding into forested mountains and watershed areas. Environmental observers have warned that vegetation is cleared and trees are cut for mining activities and fuel, while weak environmental safeguards make ecological damage and chemical leakages difficult to control.

“Every tree is dying. Rice fields are becoming less fertile and harvests are declining. Some people say their animals have died near the mining sites,” said a Kachin man who had worked at a ‘rare earth’ mine in the Nhkawng Pa area. He described how mountain slopes were drilled and chemicals injected underground through in-situ leaching, one of the most common methods used in Myanmar’s ‘rare earth’ extraction.

In the silence surrounding ‘rare earth’ extraction, community resistance finally began emerging openly in Kachin State in 2023 (4). Villagers, local leaders, church networks, and civil society organizations began speaking out. Water contamination, land loss, and the growing social costs of intensive mining had become too severe to ignore.

Although these protests did not bring overnight change, they served as undeniable proof that the threats posed by ‘rare earth’ mining were real. At the same time, as state institutions weakened, conflict intensified, and local economies collapsed, extraction became one of the fastest ways for armed groups (5), brokers, and border business networks to generate income.

The rapid expansion of ‘rare earth’ mining, enabled by conflict and political uncertainty, began moving from Kachin State into Shan State, from the Kok River toward the Mekong, and from small mountain streams toward the Salween River. After the Kachin Independence Army (KIA) expanded its control over major mining areas in late 2024, including Pangwa and Chipwi, mining activities increasingly expanded into Shan State and became more closely connected to the Kok watershed and the wider Mekong basin.

Toxicity Without Borders

“Water and sediment tests in Tha Ton found contamination in both water and soil. Yet until today, no safe water source has been provided. One year has passed, and villagers still have to buy one hundred percent of their drinking and household water... We want to see systematic remedies, economically, agriculturally, and for public health. If certain areas are no longer safe for cultivation, there should be compensation measures to reduce risks for both communities and consumers.”

— Saengrawee Suwikan, representative of Kok River communities

After severe flooding in September 2024, the Kok, Sai, and Ruak Rivers, all tributaries within the Mekong basin, as well as the Mekong itself in northern Thailand, began showing unusual turbidity. Heavy metals were later detected in rivers and streams connected to gold mines and ‘rare earth’ mining areas.

Thailand’s Pollution Control Department confirmed that the pollution originated from mining activities, though it did not specify which type of mine. However, research by Thailand Science Research and Innovation (TSRI) concluded that arsenic levels in the Kok River were more likely linked to ‘rare earth’ mining than to other forms of mining.

By 2025, it was estimated that at least 20 mines were operating in the upper Kok watershed inside Myanmar, with at least one open-pit mine located only one kilometer from the Kok River.

Within just one year, contamination had become an economic burden in daily life. In many Kok riverside communities, families who once depended directly on river water now spend between 1,500 and 3,000 baht (USD 46-93) per month to purchase clean water for drinking, cooking, and bathing. Children, elderly people, and those with chronic illnesses have become the most vulnerable.

Yet the Thai government still has no urgent measures capable of addressing this transboundary crisis. Responses remain limited to warnings, further studies, and proposals to build new water supply systems, raising a deeper question: When contamination spreads across neighboring watersheds, which river will still remain clean enough to rely on?

In 2025 alone, economic losses affecting agriculture, fisheries, and tourism across the Kok–Ruak–Sai–Mekong basin were estimated at 1.3 billion baht (USD 40 million). These figures make clear that cross-border pollution is no longer destroying ecosystems alone. It is now visibly eroding the economies of river communities, and of the country itself.

In April 2026, Thailand's Pollution Control Department confirmed arsenic contamination in Mekong river sediments in Chiang Rai at 296 milligrams per kilogram, nearly ten times accepted safety levels. In the same month, independent testing in the Salween River, Asia's last major free-flowing river without large dams, found arsenic contamination above safe levels at every sampling point.

In 2025 alone, Thailand imported more than 102.5 billion baht (USD 3.14 billion) worth of minerals from Myanmar, much of which was destined for China and Vietnam.

The question, therefore, is no longer simply how Thailand can protect its own citizens from transboundary pollution. The deeper question is: As part of the global mineral supply chain, is Thailand prepared to confront this reality with transparency and justice?

Contamination now travels across borders faster than responsibility

“There is a saying that if one day rivers fall into crisis, humanity may fall into crisis as well. When resources become scarce, human beings may begin fighting one another. I cannot help wondering whether we are already moving closer to that point.”

— Lahoo Mue Thu Dangdanwiman

Young Karen representative from the Salween Basin, Thailand

From global green narratives to geopolitical influence and financial flows, ‘rare earth’ mining across the Mekong and Salween regions is creating shockwaves unlike anything seen before.

Environmental defenders are increasingly alarmed by the growing number of ‘rare earth’ mines that are not only reshaping soils, contaminating groundwater, and slowly releasing toxic substances into streams that feed major rivers sustaining tens of millions of people across the region, but are also transforming forest landscapes in northern Myanmar. In Kachin State, where ‘rare earth’ extraction has expanded rapidly in recent years, satellite data have revealed significant forest loss around mining hotspots. Between 2018 and 2024 alone, areas where mining activities were concentrated lost more than 32,000 hectares of tree cover in subtropical and moist forests. (6) What were once forested mountains and watershed landscapes are increasingly being carved into extraction zones, leaving behind damaged ecosystems whose impacts continue to travel downstream across borders.

Mines move. Profits travel elsewhere. But contamination, and suffering, remain. This is defining a new shared map of vulnerability across a region already struggling with energy crises promoted by governments and capital alike.

As impacts spread across the Mekong and Salween basins, communities are growing increasingly alarmed. Civil society groups from Myanmar, Thailand, and Malaysia, river defenders, independent researchers, Indigenous communities, women's networks, and young people, are beginning to connect what once seemed like separate events into a shared regional experience.

Because in the end, the question is not whether the world needs energy. The question is: Whose green transition is this? And who is being asked to pay for it, with their land, their rivers, and their future?

Project SEVANA South-East Asia - A Thailand-based regional initiative working across the Mekong and Southeast Asia to support environmental justice and strengthen connections among communities, researchers, youth, and social movements. Its work focuses on the social and ecological impacts of

large-scale development projects, including dams, extractive industries, and energy transitions, while creating spaces for collective learning and cross-border solidarity.

References:

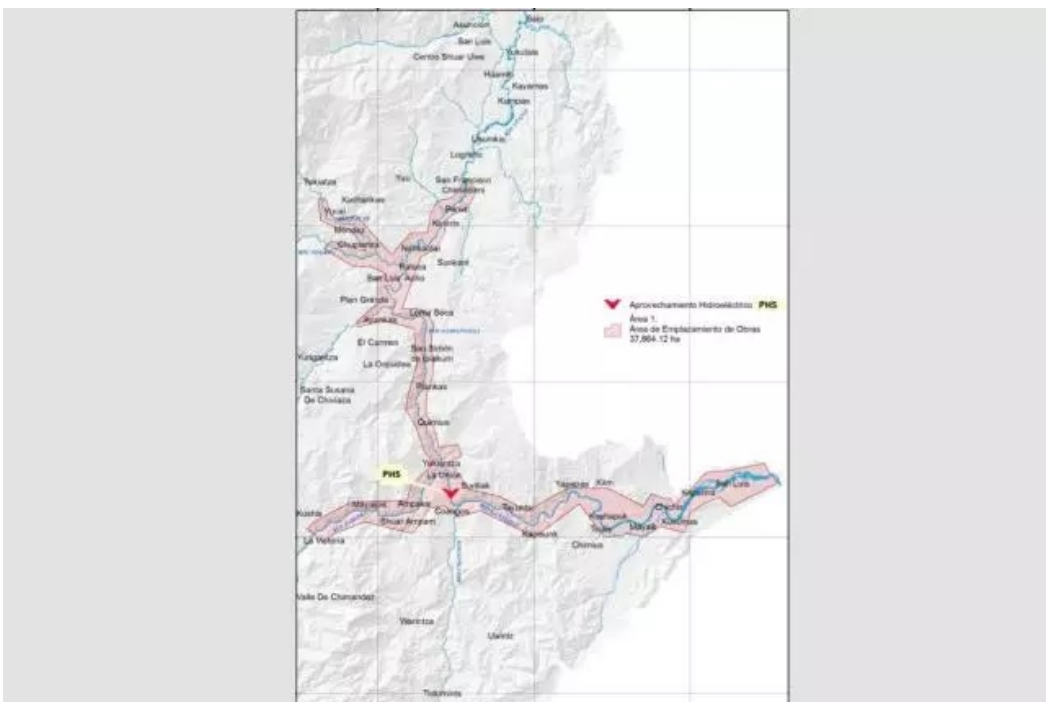
- (1) The Matter, 2026.
- (2) Mongabay, 2025. Toxic runoff from politically linked gold mine poisons Cambodian rivers, communities
- (3) Yale Environment 360, 2025. In Myanmar, Illicit Rare Earth Mining Is Taking a Heavy Toll
- (4) Rainforest Journalism Fund, 2023. How the Kachin Public Overturned a Rare Earth Mining Project in KIO Territory
- (5) Bloomberg Podcasts, 2026. The Rebel Army Behind One of the World's Major Rare-Earth Supplies | Big Take Asia
- Asialink, 2026. Myanmar: the soft underbelly of China's rare earth dominance
- (6) Mongabay, 2025. Satellite data show burst of deforestation in Myanmar rare earth mining hotspots

It's not too late to stop a devastating 'clean energy' project in Ecuador: The Santiago Hydropower Dam

In a climate of repression, the Ecuadorian government is racing against the clock to begin construction on the largest hydropower dam in the country. This project could devastate dozens of Shuar communities and submerge a vast area of ancestral territory in the heart of the Ecuadorian Amazon.

In the southern Ecuadorian Amazon, a devastating “clean energy” project is underway: the Santiago Hydropower Dam. Located in the Morona Santiago province, this dam could become the largest in Ecuador and one of the ten largest in Latin America, with a capacity of 3,600 MW. The project is expected to submerge 3,000 hectares, destroy a vast and biodiverse region, and jeopardize the lives of more than 91,000 people who live near the project site. Although construction has not yet begun, the government is pushing to make it happen as soon as possible—by, among other things, criminalizing resistance to projects that (like this one) are presented as “strategic for development.”

Ecuador's state-owned electric company (Corporación Eléctrica del Ecuador, in Spanish) is in charge of the project for now. The dam would be built on the Santiago River, about two kilometers downstream from the confluence of the Namangoza and Zamora Rivers. Of the 3,000 hectares under threat, 70 percent are native forest. There is enormous biodiversity in this area, with 532 species of flora, 205 species of land animals, 193 species of birds, and 29 species of fish – many of which are endangered (1).



On the map, the communities that could be directly affected by the construction of the Santiago Santiago Hydropower Dam (Source: ACOTENIC Cía. Ltda.)

The storage capacity of the area that would be submerged would be almost 1.64 million cubicmeters of water. This would simply obliterate 45 km of the Namangoza River and 24 km of the Zamora River. As a result, at least 45 communities and 9 villages along these rivers would be directly affected (2).

Those who would suffer the most from these impacts are the Shuar People, the main inhabitants of the region. Two Shuar communities, Yuquianza and La Unión, run the risk of being completely submerged and having their populations resettled. The rest of the communities would suffer due to flooding of the lands where they grow food, as well as significant changes to the river on which they depend. Such changes would include disruptions in river transportation, the natural flow of the river, and fishing itself – which would be drastically and irreversibly affected due to the extermination of migratory fish and mass fish deaths. These changes would seriously threaten the food sovereignty of these populations. Specifically, the communities of Mayaik, Paantam, San Luis, San Ramón, Shariam, Yunkumas and Coangos would lose their main connection route as a result of the river's submersion (3).

The Santiago River is also the main transportation artery for the Shuar in Ecuador and the Wampis and Awajún nations in Peru (4). For these Peoples, the Santiago River is known as Kanus. The destruction of the natural flow of the river threatens to socially and economically isolate the communities, disrupting age-old navigation routes used for trade, family communication and the exchange of foods, spices and knowledge. Currently, part of this route is also used for tourism.

For the Shuar People, the significance of this region cannot be captured in technical environmental impact studies. It is sacred territory. The waters of the Santiago River – or rather, the Kanus River – are inhabited by Tzunki, a sacred spirit that maintains the flow of life within these waters (5). The capitalist worldview, with its logic of offsetting or compensating for destructive megaprojects, is incapable of understanding how burying waterfalls, rivers, and even ancestral territories – such as the Cueva de los Tayos – would affect the Shuar People's way of life.

Furthermore, it is important to bear in mind that the destruction and suffering caused by the construction and operation of a project like this one extends far beyond those directly affected. The environmental, hydrological, demographic, and economic changes associated with a project of this magnitude are already well known. These impacts include uncontrolled population growth, an increase in land conflicts, and threats to the local population's traditional way of life. Additionally, there would be increased deforestation, river pollution, a greater risk of contamination from mining projects along the Santiago River, severe erosion, and increased sedimentation – which could even compromise the very functioning of the hydroelectric plant. All of this would negatively affect about 91,000 people, some of whom have ancestors who have lived in the territories surrounding the project for thousands of years.

Despite all these impacts, the project has had an environmental license since 2023, and the government is moving full steam ahead to begin construction as a Public-Private Partnership, an investment model that allows the private sector to partner with the government and benefit financially from the project. The government estimates that construction would take six years, and that commercial operation of the hydropower dam would begin by 2032.

For indigenous, peasant, and human rights and environmental organizations that oppose mining or hydropower megadams – such as the Santiago project – resistance has become increasingly risky. Between January 2024 and June 2026, the Ecuadorian government declared more than 25 states of emergency, adopting a new regulatory framework that has served to undermine the rule of law.

As often happens in Latin American countries, the official justification for this state of emergency has been allegedly to combat organized crime, but the reality is very different. These measures have expanded the State's capacity to unduly surveil people who defend human rights and nature; this has gone hand in hand with increased criminalization of indigenous and peasant individuals and organizations, heightened violent repression, and the State's continued failure to ensure accountability and provide reparations for victims.

It is necessary to pay attention to what is happening in Ecuador: beneath the enforced silence that the State imposes on the country, destructive extractive projects like the Santiago Hydropower Dam Project are moving forward – while human rights and environmental defenders face serious threats.

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References:

- (1) Presentation: "Hidroeléctrica río Santiago: ¿Destruir la naturaleza para construir vida humana? ¿Hay alternativas?", by Kashyapa A.S Yapa.
- (2) Santiago Hydroelectric Project (Phs) Con Una Potencia De 3600 Mw Estudio De Impacto Ambiental Definitivo (EIAD), Executive Summary
- (3) Idem.
- (4) Mongabay, 2025. La fuente de la fuerza shuar es amenazada por una hidroeléctrica
- (5) GK, 2022. La amenaza hidroeléctrica para el río Santiago

'Energy transition' and forest destruction in Southeast Asia

Decades of industrial energy production have destroyed vast areas of forest in Southeast Asia. The 'energy transition' trend is triggering a new wave of activities that lead to more deforestation in the region. Forest conservation programs, meanwhile, put the blame for deforestation on forest-dependent communities.

'Energy' is much talked about today, but both the word and concept are relatively new inventions. The concept of 'energy' as we know it today was created just a few hundred years ago. Entrepreneurs realized that they could use the fossil fuels coal, oil and gas to increase the productivity of their machines, and thus better control their workforce and accumulate capital. The wealth of the richest people on earth is built on the massive use of fossil fuels. This wealth has been created at the expense of social and ecological destruction. (1)

'Energy transition' does not question this understanding of 'energy'. It does not question the structural exploitation of territories and people that is inseparable from this concept of 'energy'. The social and ecological destruction that forest-dependent communities face as a result of energy-related projects continues very much the same in times of 'energy transition' – which has, above all, created more opportunities for capital accumulation for the beneficiaries of fossil fuelled capitalism. Nevertheless, it is sold by its promoters as the way to a cleaner future. Investors who got rich with fossil fuels now also invest their money into profitable business opportunities of the new wave of energy projects. This also helps them 'clean' up their image (see the 'box' about Adaro, below).

Asia has become the most industry- and energy-intensive region worldwide. A new wave of energy-related projects connected with the 'energy transition' are causing massive deforestation, in particular in Southeast Asia. Without pretending to present a complete picture, this article gives a glimpse of how energy-related projects impact on and threaten forests and forest-dependent peoples in Southeast Asia.

Coal extraction

Indonesia is the main coal extracting country in Southeast Asia, and coal is the main source of electricity generation in the region. Since 2020, Indonesia's coal production has annually increased and in 2024, reached a new production record of 831 million metric tons. (2) This alone suggests that the supposed 'energy transition' is a lie.

Main export destinations are China and India. From there, coal is embedded in manufactured goods supplying the industrialized world, just like other export-oriented energy projects mentioned below.

Coal mining is also a key driver of deforestation. The Indonesian anti-mining network JATAM reported in 2025 that in the province East Kalimantan mining – coal mining in particular - was the main driver of deforestation, responsible for 4.2 million hectares of forest destruction. (3) Provincial regulations oblige mining companies to restore mining pits; however, most companies fail to fulfil their legal obligation to reforest. Media reports suggest that about 1,700 mining pits have been abandoned before the required restoration was carried out. (4)

While Indonesia is the main coal producer in Southeast Asia, China and India are the main coal producers in the world. According to official data, in Indian states of Chhattisgarh, Jharkhand and Madhya Pradesh, forest-rich districts with coal mining have lost an 51,900 hectares more than districts without coal mines. (5)

Hydropower dams

Along the 5,000 km long Mekong River and tributaries, three decades of hydropower dam construction has destroyed large forest areas. State and private interests, in particular from China and Thailand, use 'energy transition' to push for and justify the building of more dams. Activists are warning that a 'final battle' to save the Mekong River is underway, with the latest announcements for yet more mega-dams risking to devastate the Mekong River. (6)

In Indonesia, the government plans to use hydropower to increase the share of 'renewable energy' in its energy matrix. Two priority hydro dam projects, located in North Kalimantan province, threaten a forest region that conservationist NGOs like WWF call 'The Heart of Borneo': the 1.3 GW Mentarang Induk Hydropower plant is already under construction while the 9 GW Kayan Hydroelectric Power plant is still in the planning phase. (7)

The case of Adaro: 'Green transition', 'greenwashing' and deforestation

The Adaro group is one of Indonesia's major coal mining companies. However, in times of 'energy transition', Adaro presents itself as a 'green' company, even if in reality it is increasing its own deforestation track record. Adaro's CEO and co-owner, Garibaldi "Boy" Thohir, leads a consortium that is building the Green Industrial Park KIH in North Kalimantan. Indonesia's ex-president Jokowi called it "the largest green industrial area in the world", in reference to the solar panels and electric vehicle batteries to be produced there. This ignores the destruction of 30,000 hectares of lands including forests to set up the industrial Park. (8) Adaro also has stakes in one of KIH's industries: PT Kalimantan Aluminium Industry. The company plans to process bauxite from West Kalimantan, where bauxite mining is a driver of deforestation. (9) To ensure the massive electricity demand of aluminium smelting, Adaro became 50 percent co-owner of the Mentarang hydropower dam project, while simultaneously building a coal-fired power plant to meet the smelter's energy needs. (10)

Nickel mining

Nickel is crucial to the 'energy transition'. It is a key component in lithium-ion batteries used to power electric vehicles and so-called renewable energy storage units. In 2023, thousands of villagers on Halmahera Island, in North Maluku province, Indonesia, collided with security forces when they occupied the installations of the company PT IWIP (Weda Bay Industrial Park), the epicentre of Indonesia's nickel industry. Villagers protested against the destruction of the Boki Marure Karst area, a forested area the residents have been guarding for generations. (11)

Indonesia has about half of the world's nickel reserves. Among the many affected communities are the O'Hongana Manyawa, one of the remaining nomadic Peoples in Indonesia. O'Hongana Manyawa means 'People of the forest'. One O'Hongana Manyawa comments that: "if it continues like this, the forests in Halmahera will be destroyed. The trees will be cut down; the animals will be driven out and die because their homes have been completely cleared. Then where will we live?" (12) According to a study, the Indonesian nickel industry destroyed at least 75,000 hectares of forests until 2024. (13)

The Philippines is the other major nickel producer in SE Asia. The Alliance to Stop Mining (Alyansa Tigil Mina) denounces how Palawan Island, with its extensive forest areas, including mangroves, has become one of the main nickel mining areas, ignoring laws that protect forests and ignoring Indigenous communities saying “No” to mining. (14) According to one community member: “It’s our culture that has been affected, because the environment is being destroyed. It is our belief that there are spirits in the mountains and the spirits are angry because of the destruction of their homes, the trees, the forest.” (15)

In Santa Cruz, in Zambales province, four large-scale nickel companies are active. One community member said: “Before nickel mining, the mountains were filled with trees. We earned a living purely through farming vegetables and root crops. Life was good back then.” Another community member adds: “The companies really dig up the mountain and the trees that protect us from flooding. Now when it rains, it floods.” (16)

The Caraga Region is the epicentre of nickel mining in the Philippines. A fisherwoman says: “Before, if there was a storm, the ocean water wouldn’t penetrate the river system, and the winds would be stopped by the trees. The forest cover was very thick, which protected us from storms. Now, big waves come in, and the flooding is more severe. Water runs down from the mines and brings mud, while stronger winds hit the village.” One fisherman adds: “The mud poisons the mangroves, and some of the mangroves have died. They try to replant them, but they won’t grow.” (17)

‘Rare earth’ mineral mining

‘Rare earth’ mineral mining is about the extraction of 17 metals. Contrary to what the name suggests, these deposits are not actually rare, but scattered which in turn makes their extraction expensive. As components of wind turbines and electric vehicles, these elements are crucial for the ‘energy transition’. Myanmar is the main country in SE Asia in terms of ‘rare earth’ mineral mining, followed by Thailand, Vietnam and Malaysia, with Vietnam having the biggest known reserves in the region. (18)

In Kachin state in northern Myanmar, the boom in ‘rare earth’ mineral mining already caused severe impacts (see article in this bulletin), including more than 30 thousand hectares of deforestation in the period 2018-2024. According to a spokesperson: “There has [also] been a noticeable rise in deforestation since around 2018, with sharp increases particularly around mining zones due to road construction, land clearing for extraction activities, and widespread tree cutting for fuelwood or to dry the rare earth sludge.” (19)

Bioenergy

In Indonesia, organisations warned in 2021 that 10 million hectares of forests were at risk due to the demand for woody biomass energy from Japan and South Korea as well as Indonesia. All three countries, were planning to increase the use of wood pellets to co-fire coal power plants. (20) A report from 2024 on deforestation for woody biomass and the setting up of ‘energy’ tree plantations in Kalimantan, Sulawesi and Papua points to a staggering increase in wood biomass export volumes. (21)

Industrial oil palm plantations produce Indonesia’s main commodity, palm oil. It has been responsible for millions of hectares of deforestation. The latest pretext for expansion has become the domestic use of biodiesel. A 66 per cent increase in deforestation in 2025, if compared with 2024, might be related to the government’s policy to expand biodiesel use, blending it 50 per cent with conventional diesel oil. West Papua is the new frontier of oil palm expansion in Indonesia. (22)

Papua: The new deforestation frontier

As a result of colonization, the island of Papua is divided in a western part controlled by Indonesia and the country Papua New Guinea, on the eastern side of the island. Papua holds the biggest and most diversified forest area that still remains in SE Asia and is home to numerous Indigenous Peoples. But it is also heavily under threat by energy-related projects.

In West Papua, one tactic used by the Indonesian government to destroy huge forest areas without the destruction appearing as 'deforestation' in monitoring statistics, is to reclassify areas as 'non-forest'. This is a common practise in particular where it benefits industrial oil palm companies. (23) Another tactic is attempting to label monoculture oil palm plantations as forests. For example, the President has argued that oil palm plantations are forest because "oil palms are trees (..) they've got leaves (..) We don't need to be afraid of endangering – what's it called – deforestation, right?" (24)

The biggest deforestation project in West Papua, and probably worldwide, is the Merauke National Strategic Project. (25) 560,000 hectares of the more than 2 million hectares which the government of Indonesia has allocated to the Merauke Project, would be turned into sugar cane plantations, among others, to produce bio-ethanol. The government plans a mandatory 10 percent ethanol mix for petrol. (26) Another dangerous threat for forests in Papua is the decades-old plan by the Indonesia government to build the Mamberano River hydropower dam complex. If built, it could become the world's largest hydropower complex, with potential to provide electricity for numerous mega-industries in special economic zones. It would be a 'death certificate' for the future of Papua's forests and Indigenous Peoples.

In the Gulf province in Papua New Guinea, French oil company TotalEnergies plans a mega-liquified fossil gas project with production wells, a pipeline and processing plants. (27) The government also plans to expand industrial oil palm plantations by up to 1.5 million hectares by 2030, combined with factories for biodiesel production. (28)

Geothermal mining

In Indonesia, legally protected unfragmented forests have been opened for geothermal mining. A law approved in 2014 considers geothermal mining not a 'mining activity'. Many forest-dependent communities in the archipelago are now struggling against the mining companies drilling for potential mining sites inside primary forest areas, for example on the island of Flores. (29)

Forest conservation that triggers more deforestation

Governments' forest conservation plans in SE Asia are increasingly based on carbon trading and offsetting, turning the protection of forests into one more business opportunity. Whenever such plans are put in practice, those behind the plans tend to blame forest-dependent communities for deforestation. The drivers of large-scale deforestation such as those described in this article, by contrast often go without mention; where they are mentioned, they are described as an unfortunate occurrence. Restrictions do not target this large-scale destruction for energy but traditional farming and livelihood activities of peasant farmers and forest-dependent communities.

In Indonesia, one of the first jurisdictional REDD programs was implemented between 2019 and 2024 in the province of East Kalimantan. On the one hand, the program, supported by the World Bank, did not restrict the operations of industrial oil palm plantations, or the logging and mining sectors. (30) On the other hand, Indigenous communities that have taken care of the forest they depend on, have

faced severe restrictions. The indigenous Dayak Bahau community of Long Sun, for example, has been struggling for recognition of their ancestral rights over the lands and forest they depend on. They reported restrictions imposed on them as part of the jurisdictional REDD program, due to which they lost access to forests which women in particular depend on. Using fire to prepare fields for planting in the forest and tree felling for building material were also prohibited. One of the village women explains that her community has processes and practises in place that were developed over hundreds of years and do not destroy the forest. When land is burnt, special rituals are performed so that the fire does not spread. She says “I think the best forest caretakers are Indigenous communities”. (31)

Final remarks

This article describes the connection between energy-related projects and deforestation in Southeast Asia. While incomplete, it shows the extent of the destruction caused by massive deforestation that results from such energy-related projects, whether related to fossil or ‘clean’ energy. It shows how ‘energy transition’ builds anything but a ‘cleaner’ future.

Increasingly intertwined with this ‘energy transition’ trend, is an expansion of militarized conservation in Southeast Asia through government policies and plans; the UN Convention of Biodiversity (CBD) targets like the 30x30 conservation target to protect 30 percent of land by 2030 in protected areas; and private sector so-called ‘nature-based solutions’ initiatives. Discussing what energy and energy transition are really about is therefore fundamental and urgent.

With the increasing pressure over people’s territories, strengthening the support to communities facing all these projects and threats is equally urgent. Not only to strengthen the struggles to defend their territories and forests but also to build stronger alliances and movements in the region to resist.

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References:

- (1) WRM, 2025. [The heart of the problem: we need to talk about energy](#)
- (2) Wikipedia. [List of countries by coal production](#)
- (3) KOMPAS.TV, 2025. [Deforestasi Tambang di Kaltim Capai 4 Juta Hektare, JATAM Soroti Dampak Lingkungan](#)
- (4) Mongabay, 2025. [Indonesian civil society urges probe after payout for mine recovery that never happened](#)
- (5) WRM, 2019. [India: Mining, Deforestation and Conservation Money](#)
- (6) WRM, 2022. [“Energy Trade or Our Life”: The Struggle Against the Dams in the Mekong River Mainstream](#)
- (7) Nugal Ecologica Indonesia and WRM, 2026. [The Mentarang-Kalimantan hydropower dam in Indonesia: Electricity for whom?](#)
- (8) WRM, 2023. [The Industrial Park KIPI reveals the dirty and destructive face of Indonesia’s “green” transition](#)
- (9) Mighty Earth, 2024. [The impact of the Bauxite boom on people and planet](#)
- (10) Both the Mentarang and the Kayak hydropower dams will also provide energy for Indonesia’s new capital IKN in East Kalimantan, called a ‘smart, green and forest’ city. See: WRM, 2023. [New Capital Cities, Deforestation and Social Apartheid: Parallels Between Brazil and Indonesia](#)
- (11) WRM, 2023. [Indonesia: Protests against mining for electric vehicles](#)
- (12) IWGIA, 2025. [Nickel for Electric Vehicles threatens key forests and the last nomadic tribes in Indonesia](#)
- (13) Mighty Earth, 2024. [From forests to electric vehicles](#)
- (14) Alyansa Tigil Mina, 2026. [UnderMiningRights: mining-induced human rights violations and environmental destruction](#)
- (15) Amnesty International, 2025. [Philippines: What do we get in return? How the Philippines nickel boom harms human rights](#)
- (16) Ibid

- (17) CRI, 2025. “Broken Promises” **Philippines Nickel Mining Causes Rights Abuses and Increases Climate Vulnerability**
- (18) Eco-business, 2025. **Southeast Asia’s potential role in rare earth elements diversification**
- (19) Mongabay, 2025. **Satellite data show burst of deforestation in Myanmar rare earth mining hotspots**
- (20) FWI, 2024. **Report: Wood Energy Boom Threatens Southeast Asian Forests and Communities**
- (21) Mongabay, 2024. **Indonesian forests put at risk by South Korean and Japanese biomass subsidies**
- (22) Mongabay, 2026. **Indonesia’s deforestation surges 66% in 2025, reversing years of decline**
- (23) WRM, 2020. **Indonesia: REDD+, European Development Funding and the ‘Low-Carbon Economy’**
- (24) Mongabay, 2026. **Indigenous communities oppose Papua forest rezoning for palm oil**
- (25) WRM. **Indonesia: Stop the Merauke National Strategic Project!**
- (26) Greenpeace, 2025. **Sweet Promises, Bitter Reality: Inside the Merauke Sugarcane Project**
- (27) Total Energies. **The Papua LNG project**
- (28) Global Witness, 2021. **The true price of palm oil**
- (29) Mongabay, 2026. **Indonesia’s deforestation surges 66% in 2025, reversing years of decline**
- (30) WRM, 2024. **How Jurisdictional REDD in Indonesia threatens forests and benefits NGOs: the case of East Kalimantan**
- (31) Mongabay, 2025. **Tolak Proyek Karbon, Masyarakat Long Isun Surati Bank Dunia**

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

The government of Brazil plans to increase gas production in the coming years and invest billions of dollars in infrastructure for the sector. Among the planned projects is a gas pipeline that could cross hundreds of kilometers of the Amazon rainforest, boosting predatory industrial activities and impacting communities.

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'.

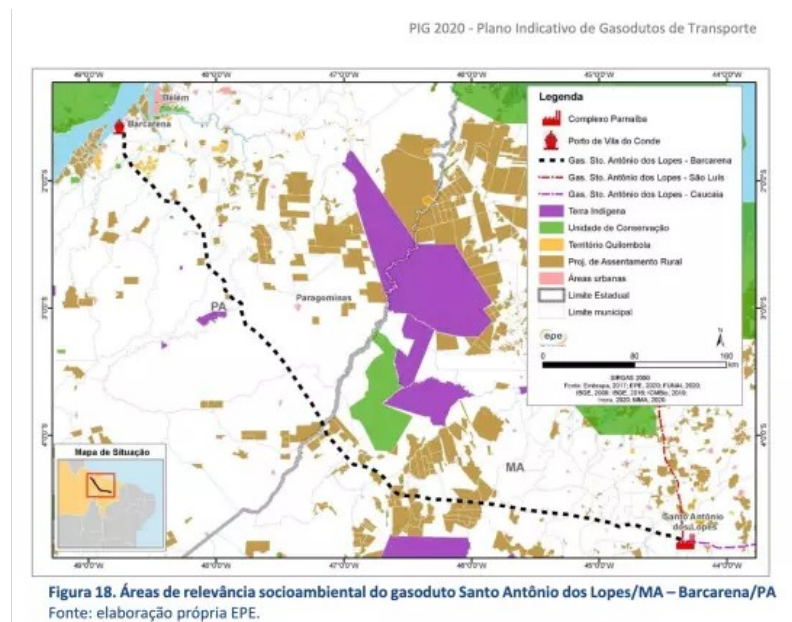
The 'natural' in the name helps in creating this false impression; it disguises that what is called 'natural gas' is also a fossil fuel and no more or less natural than oil or coal. Moreover, in most cases, oil and gas are in the same deposits and are extracted together. (5) The burning of fossil gas 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.



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)



*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 in 5 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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References:

- (1) EPE, 2024. [Plano Decenal de Expansão de Energia](#).
- (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. [Balanco anual 2024](#).
- (5) 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”. OPEC, 2025. World Oil Outlook

(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

(9) Fiocruz, Mapa de Conflitos. AM – Gasodutos podem atrair destruição para região bem preservada do Amazonas

(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)

(13) USP, 2011. Gasoduto Urucu-Coari-Manaus: Impacto Ambiental e Socioeconômico no Município de Manacapuru-AM

(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."

(16) ANP, 2011. Processo de Outorga de Gasodutos. Processo de licenciamento ambiental (nº 02001.000454/07-64) que teve entrada no IBAMA em 20/12/2007.

(17) Valor, 2022. Empresário relacionado a Rodolfo Landim e Adriano Pires, Carlos Suarez investe em energia e gás.

(18) ABA, 2017. Gás Fumaça e Zoada - laudo antropológico sobre impactos das usinas termelétricas do Complexo Parnaíba para populações tradicionais.

(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.

(20) Eneva, 2022. Eneva e Suzano fecham primeiro contrato de suprimento de GNL do Brasil de um produtor diretamente para um cliente industrial

(21) WRM, 2023. What you need to know about Suzano Papel e Celulose

(22) WRM, 2024. Tree plantations for the Carbon Market. Why and how and where are they expanding?

(23) Eneva, 2025. Perspectivas para a produção, transporte e distribuição de gás natural no Amazona

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

(25) InfoAmazonia, 2026. Eneva devolve três blocos de gás que atingiam terras indígenas e quilombolas no Maranhão

(26) Agência Pública, 2024. “Bomba prestes a explodir”, Barcarena, no Pará, vira novo polo de gás natural. In addition to this NFE LNG Terminal, there is another LNG Terminal planned to be built in Barcarena by Termogás, but it is currently facing legal obstacles with its environmental licensing process.

(27) In 2021, Hydro signed a 15-year supply agreement with NFE to consume approximately 1 million gallons of LNG per day, which would be exclusively destined for the Alunorte refinery. This contract was crucial in securing the construction of the terminal. For more information see: Businesswire, 2021. NFE and Hydro Finalize

Definitive Commercial Terms for Natural Gas Supply to the Alunorte Alumina Refinery in the State of Pará, Brazil

(28) Hydro, 2026. Integrated Annual Report 2025

(29) Observatório da Mineração, 2025. Gigante norueguesa Norsk Hydro reforça discurso de “alumínio verde” em ações vinculadas à COP 30 e ignora impactos socioambientais no Pará e WRM, 2019. Brazil: Hydro Alunorte’s Alumina Tailings Dam. A Disaster Foreshadowed?

(30) WRM, 2019. Brazil: The Struggle of the Xinguara Peoples in the Amazon

(31) Amazon Watch, 2001. A Reserva de Gás e Gasodutos de Urucu Ameaça Áreas Intactas da Floresta Amazônica Brasileira

FROM THE WRM BULLETIN ARCHIVES

República Democrática del Congo: teléfonos celulares, destrucción de bosques y muerte

“¿Alguien podría imaginar que los teléfonos celulares están manchados de la sangre de 3,5 millones de muertos desde 1998? ¿Y que lo mismo ocurre con los video juegos infantiles? ¿Y que las mega-tecnologías contribuyen a la depredación de los bosques y a expoliar los ricos recursos naturales de pueblos paradójicamente empobrecidos?” Así comienza este artículo escrito en 2003 que denuncia la violencia de la explotación minera del “coltán” en la República Democrática del Congo (RDC) y señala a los verdaderos actores que están detrás del conflicto que sigue activo en el país. La RDC, principal productora mundial de este mineral, sigue siendo hoy uno de los principales productores de diversos minerales estratégicos para la supuesta ‘transición energética’. Más de 20 años después, la disputa por los minerales sigue alimentando un conflicto sangriento en el país. Y el análisis político que presenta dicho artículo sigue siendo actual: “por detrás del mito de las rivalidades étnicas se esconden las antiguas potencias coloniales que continúan saqueando las riquezas del África postcolonial”. El artículo también señala: “por detrás de los Estados, son las empresas las que se reparten la zona”. A finales de 2025, uno de los actores que operan entre bastidores en este conflicto logró extender su control, avanzando sobre la soberanía del país: la República Democrática del Congo firmó un acuerdo con Estados Unidos que garantiza a este país acceso prioritario a minerales críticos para su industria y su ‘transición energética’. Vale la pena [leer el artículo](#) para comprender mejor este violento conflicto que sigue afectando la vida de diversas comunidades en la RDC.

Referencia:

(1) El acuerdo entre Estados Unidos y la República Democrática del Congo (RDC) sobre minerales críticos está disponible en: [Acuerdo de Asociación Estratégica entre el Gobierno de los Estados Unidos de América y el Gobierno de la República Democrática del Congo](#).

RECOMMENDED

Interview: The Political Construction of AI

“The Political Construction of AI”, produced by the Turkish organization bianet.org, published an interview with Larry Lohmann, activist with the UK-based The Corner House and member of the WRM Advisory Committee. He characterizes ‘artificial intelligence’ (‘AI’) as a form of “machine colonialism” marked by indefinitely-ballooning energy consumption and brutal grabs of water and low- and zero-cost labor. Like other industrial technologies, Lohmann notes, ‘AI’ takes advantage of the 19th-century emergence of an “abstract” energy that subordinates a variety of other diverse energies into a single overarching fuel for capital. As neoliberalism descends into fascism, democratic resistance to the centuries-old but now bloated capitalist strategy of ‘AI’ will require more sharing and unity between labor and ecology movements. The interview is available on The Corner House website, [in English, Turkish, Spanish and Portuguese](#).

Documentary: "Pig Feast: Colonialism in our time"

“Pig Feast: Colonialism in our time” is a documentary that paints a vivid picture of Papua and its Indigenous Peoples, artificially separated by colonialism and suffering from its oppression until today.

It highlights the indigenous resistance against the large-scale destructive projects, in particular the National Strategic Project Merauke, with 2.5 million hectares currently the world's largest deforestation, including oil palm and sugar cane monocultures for biodiesel and ethanol production. The documentary shows how the ongoing land grabbing is destroying the livelihoods and territories of Indigenous Peoples. It exposes how a few rich families and companies, with full support of the Indonesian government and military, are profiting from this destruction. The symbol of resistance are 1,800 red crosses which Indigenous Peoples in Papua erected in and around their territories over the past 10 years. As one Indigenous man explains: "We believe that if we are unable to resolve a problem, in this case preventing a company from entering our land, we ask for help from our ancestors and God. On the crosses, we inscribed or drew the attributes of war that are meant to show that we strictly prohibit anyone from entering or disturbing our territory. If anyone breaches these signs, or threatens our ancestral land rights, we are prepared to fight a war." The film is having a tremendous impact inside Indonesia, so much so that government authorities have halted or suppressed more than 10 film screenings. To ensure the documentary remains available, the film makers and producers have put the documentary on Youtube. The full documentary in English can be accessed [here](#) and in Bahasa Indonesia [here](#). See also [this article](#) in English about the film.

Stop new oil block auctions in the Ecuadorian Amazon!

Indigenous Peoples from Ecuador are calling for support to stop the expansion of the oil frontier in the Ecuadorian Amazon. In September 2025, the Ecuadorian government announced its plans to auction off at least 11 oil blocks in the provinces of Napo and Pastaza. Three million hectares of Amazon rainforest could be handed over to oil companies, impacting the Achuar, Kichwa, Sapara, Shiwiar, Waorani, Waoani, and Shuar, as well as the Tagaeri and Taromenane, who live in 'voluntary' isolation. "For the State, these areas are oil blocks, but for us, they are territories of life and our home," denounces an Indigenous leader in a campaign video. Following large mobilizations in 2012 and 2013, Indigenous Peoples in Ecuador had already blocked the auctioning off of the very same blocks inside their territories for more oil exploitation. Faced with the new government offensive, they are adamant, "We did not give our consent. We resisted before and we will resist now." The petition is available in English, Portuguese and Spanish. Sign [here](#) to support the campaign against auctioning off new oil blocks in the Ecuadorian Amazon.

Energy Transition Observatory

The Energy Transition Observatory is a platform providing information about the impacts of supposedly 'clean energy' projects on Indigenous and Quilombola territories, conservation units, and agrarian reform settlements in Brazil. Through an interactive map, users can verify which energy sources presented as 'clean' are impacting which territories of traditional communities in the country. This tool might be useful for those looking for concrete data on the impacts caused by mining of 'strategic metals', power transmission lines, solar and wind power plants. The material produced by the NGO Repórter Brasil in partnership with Inesc and PoEMAS is available in Portuguese [here](#).

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