COP30 Presidency Roadmap for Transitioning Away from Fossil Fuels in a Just, Orderly and Equitable Manner

Submission to the UNFCCC by Earth Insight
Map Annex

a) What are the most critical barriers — whether physical, economic, financial, institutional, technological or social— preventing a transition away from fossil fuels?

There are three major barriers to implementing a just transition away from fossil fuels (TAFF):

First, the absence of fully-financed just transition plans leaves fossil fuel-dependent governments with no credible alternative to continued extraction. Many vulnerable producing countries are fiscally and politically dependent on fossil revenues, even if they are marginal global producers. Fiscal revenues from fossil fuel extraction collected by federal and local governments are often critical to maintain social and security services, infrastructure, and networks of political clientele. Similarly, fossil fuel exports are a major source of foreign currency, particularly US dollars, necessary for governments to service debt costs efficiently, bolster their credit rating and ensure their currency's stability. Therefore, fossil fuel extraction is a pillar of many producing governments' strategies to maintain their sociopolitical stability and political legitimacy.

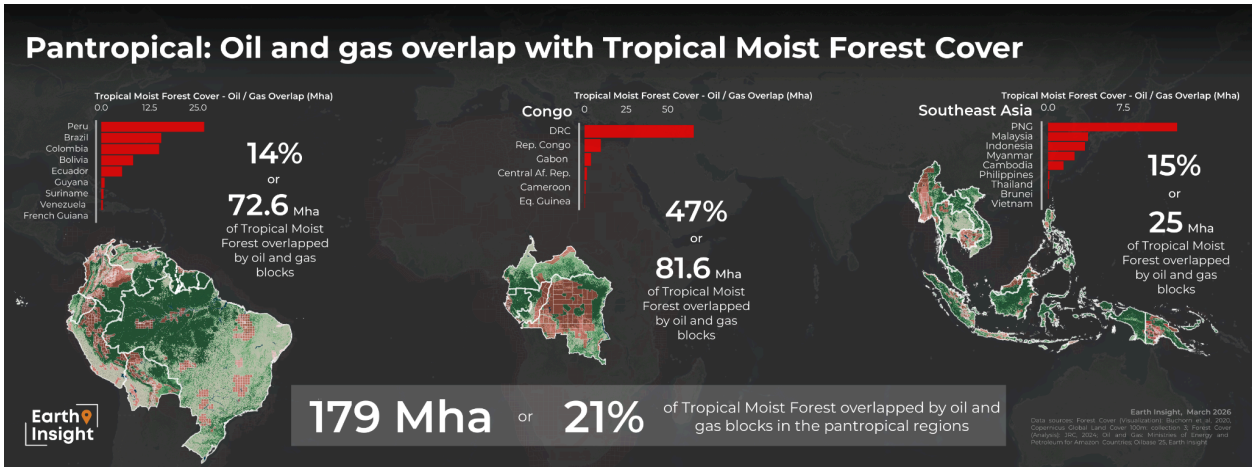
The current context of growing geopolitical volatility, with wars and foreign interventions in Ukraine, Iran and Venezuela directly linked to control over fossil fuel markets, and the lingering fiscal crisis caused by the Covid-19 pandemic, exacerbate the pressure on vulnerable producers to frontload the development of new resources to strengthen their international and domestic standing.

The severity of the immediate pressures to maintain government services, infrastructure, debt servicing and currency stability may trump the long-term prospects that these assets are

economically unviable in a context of shrinking fossil demand. **This mismatch in incentives creates the risk of a disorderly global transition shaped by volatile international energy markets and boom and bust cycles of fossil supply expansion**, creating a high amount of physical and financial risks of stranded assets in the long term as global fossil fuel demand peaks and declines.

Moreover, most clean technology and investment flows remain concentrated in the Global North and China. Renewable energy projects in developing countries face capital costs two to three times higher than in developed economies. This threatens to keep the Global South at the bottom of global economic value chains as the world transitions, deepening rather than redressing existing inequalities and blunting the economic pull factor of renewables for vulnerable fossil fuel producing countries in the Global South.

Second, without proper supply-side governance, the negative impacts of a disorderly transition on nature and people are significant. Almost 27% of global conventional oil resources overlap with top-priority socio-environmental areas, a figure that grows to 31% when including gas resources [*EXIT Research Group analysis, forthcoming publication*]. Research shows that oil and gas blocks already overlap with approximately 179 million hectares of tropical moist forests or 21% of the forest cover across the Amazon, Congo Basin, and Southeast Asian basins. In Congo region countries this overlap is as high as 47%. In 2024 alone, 85% of new oil discoveries were made offshore, frequently overlapping with marine biodiversity hotspots. In the Amazon, oil and gas blocks also overlap with 12% of Indigenous Peoples and local communities' territories.



Developing fossil fuel resources beneath key biocultural areas will not lead to durable financial and political stability, even if they provide a short-term political relief for some governments. Research on Colombia, for example, found that developing untapped reserves beneath the Amazon would generate billions of dollars in stranded assets under every IEA climate scenario, while doing little for national energy security. The development of unexploited reserves would also put at risk up to 70% of Indigenous Peoples and local communities whose territories are

overlapped by fossil fuel concessions in the Colombian Amazon. Instead, leaving these reserves untapped would protect the area with the highest biodiversity value in the world.

Recent analysis indicates that no new fossil fuel developments are compatible with climate safety. Setting stringent social and environmental guardrails for any new fossil developments can help set the world on a pathway to comply with this benchmark, particularly for highly-biodiverse countries in the Global South who may not be ready to commit to no new developments in general. Establishing Fossil Free Zones to protect highly valuable biocultural areas would avoid preventable harm to territories, ecosystems and communities, including Indigenous Peoples, and avoid new forms of extractivism in the energy transition.

Third, the current fragmentation of fossil fuel governance disincentivises cooperation and coordination amongst fossil fuel producers to manage the transition. Decisions on trade, taxation, industrialization, and energy investment continue to occur independently and in an uncoordinated fashion, disregarding climate commitments and the current pace and direction of the energy transition. Recent plurilateral initiatives on fossil fuels, like the Fossil Fuel Non-Proliferation Treaty (FFNPT), the Beyond Oil and Gas Alliance (BOGA) or the Coalition on Phasing Out Fossil Fuel Incentives Including Subsidies (COFFIS) are valuable steps in the right direction. However, they have limited enforcement mechanisms and no effective systems to coordinate and align their strategies, leading to wasteful duplication and mutually undermining diplomatic strategies. Without a more coherent international framework to govern the fossil fuel transition, competitive pressures to gain a bigger relative share of a diminishing global energy market will continuously incentivise short-term defection by fossil fuel producers from any agreement to limit supply, even at the risk of future financial risks and losses.

b) What potential levers, whether economic, financial, institutional, social or technological, exist for accelerating the implementation of the transitioning away commitment?

The designation of Fossil Free Zones (FFZs) or similar place-based supply-side policies, provides a simple, concrete, first step to bolster the governance of the transition away from fossil fuels. FFZs are geographically defined areas permanently protected from fossil fuel exploration, extraction, and related infrastructure development due to their ecological, biodiversity, cultural, or socio-economic importance.[1]

[1] The definition of FFZ in this document builds on the term introduced in academic literature by Dr. Fergus Green in 2022, where he proposed Fossil Free Zones as a framework "to facilitate grassroots, goal-driven climate action, and government policy…" and defined it is defined as "a geographic area characterised by the complete absence of fossil fuel exploration, production, transportation, intermediate treatment, and consumption activities", but with a focus exclusively on fossil fuel supply.

The COP30 roadmap to transition away from fossil fuels should highlight them as **a policy strategy readily available to governments to translate their global commitments into specific, territorial decisions** that can be easily adopted at the national or subnational level.

Fossil Free Zones are proven policy approaches with relatively low administrative costs while their potential reputational, social and environmental benefits are significant. In most cases, implementing FFZs can be done on the basis of existing policy mandates for environmental protection, territorial planning or defending Indigenous Peoples and local communities' rights and territories. Governments can draw from their experience in the establishment of protected areas, other effective area-based conservation measures (OECMs), land-use planning frameworks, and the recognition of Indigenous Peoples and local communities' land tenure, which are well understood at regional, national and sub-national levels and for which exist well-established international guidance. In many cases, preventing the licensing of *new* concessions in sensitive areas on the basis of existing environmental and human rights legislation can be an effective first step without substantial legal risks in a path to establish full FFZs.

Establishing Fossil Free Zones is also consistent with existing intergovernmental commitments for the protection of critical ecosystems. The International Union for Conservation of Nature (IUCN) has adopted **several resolutions that call for the adoption of geographical exclusions of extractive industries to avoid irreversible ecological damage and tipping points** in critical ecosystems. It is the case of:

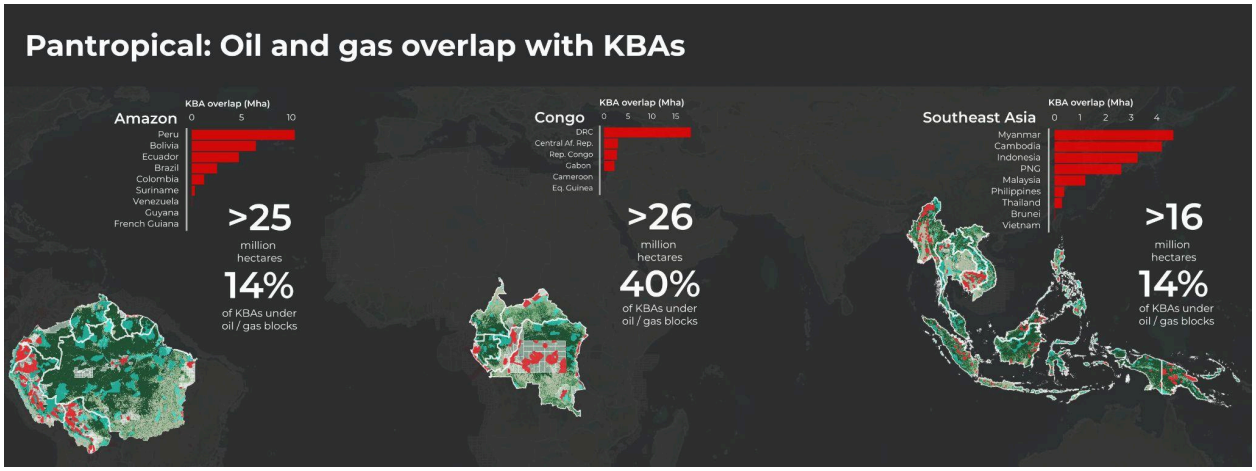
- IUCN Resolution 140 (2025) on "Avoiding Irreversible Ecological Damage and Tipping Points in the **Congo Basin**", which calls for adopting geographical exclusions of extractive industries in intact and high-integrity ecosystems.
- IUCN Resolution 068 (2025) on "Emergency action to restore 80% of ecological integrity in **Amazonia** by 2030 preventing cascading tipping points", which calls for restoring and maintaining at least 80% of ecological integrity to prevent cascading tipping points, including through the geographical exclusion of extractive industries.
- IUCN Resolution 129 (2020) on "Avoiding the point of no return in the **Amazon** protecting 80% by 2025", which calls for a moratoria on industrial activities in primary forests and the full recognition of Indigenous Peoples' rights and governance.

Together, these resolutions establish a clear scientific and intergovernmental basis for place-based approaches such as Fossil Free Zones to protect high-integrity ecosystems from fossil fuel extraction.

Moreover, FFZs contribute to putting human and environmental rights at the core of the fossil fuel transition and empowering subnational governments and right-holding communities to participate in the design and implementation of the transition, including through the recognition and implementation of the principle of Free, Prior and Informed Consent (FPIC). They protect affected communities' rights and territories as well as critical ecosystem services like carbon absorption or watershed services from the threats of further degradation and pollution caused by fossil fuel extraction.

Meanwhile, FFZs also help mitigate the financial and physical transition risks of a volatile transition driven exclusively by international energy market dynamics. They manage the risks of developing new or remote fossil fuel resources that often have higher capital and operational costs, ensuring that the short-term boom and bust cycles of a disorderly transition, driven by short-sighted financial or political interests, do not come at the expense of long-term stranded asset risks and avoidable impacts on nature and communities.

Conversely, there is an **emerging economic logic for protecting areas of high biocultural significance from fossil fuel extraction**. As of 2024 there were 918 protected areas globally hosting ongoing or planned fossil fuel extraction projects and 518 KBAs (or 18% of KBAs by area) in tropical regions that are overlapping with active and potential oil and gas blocks. Creating Fossil Free Zones in these areas, particularly in forested nations, could generate jobs and revenue from protected area management, watershed services, and sustainable tourism, while safeguarding the small-scale agriculture that most rural economies depend on. Over 33 million people are employed directly in the forest sector, and there are more than 1.6 billion small forest farm producers.

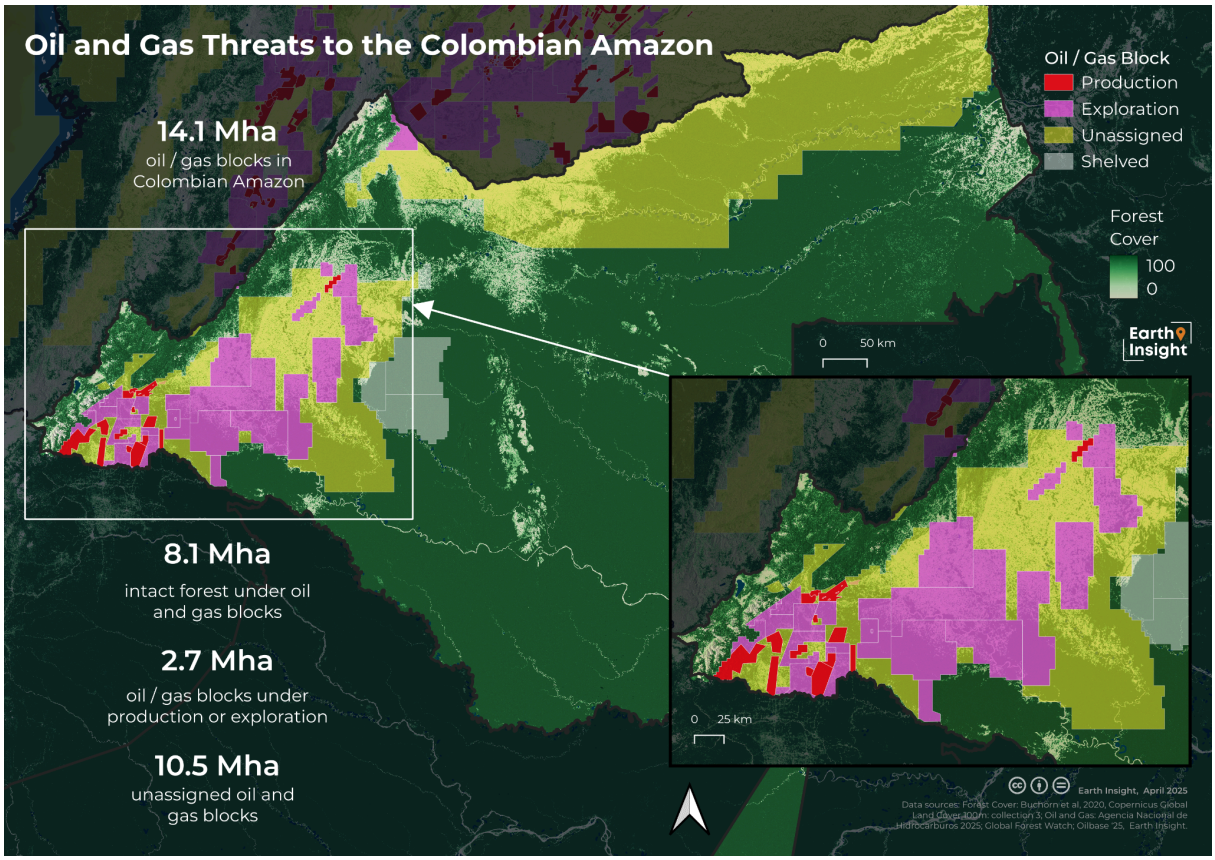


FFZs are thus also an effective strategy to strengthen policy coherence and synergies between the energy transition and other international environmental commitments such as halting and reversing deforestation and achieving Target 3 of the Kunming-Montreal Global Biodiversity Framework of conserving 30% of land, waters and seas by 2030.

c) What country, regional or sector roadmap experiences, best practices, and lessons learned can be shared?

A recent and illustrative example of a Fossil Free Zone is the Colombian Amazon. Last September, the government of Colombia announced a landmark ban on fossil fuel and large-scale mining extraction across its entire Amazon region. Colombia's decision followed demands from Indigenous Peoples, civil society organisations and members of parliament to end fossil fuel extraction in the Amazon. The decision was taken in the wake of research that found that developing untapped reserves beneath the country's tropical forests would generate billions of dollars in stranded assets while doing almost nothing for national energy security.

Developing these reserves would, however, threaten **20% of the intact Amazon forest** and the territories of **nearly 70% of the Indigenous and local communities** whose lands are overlapped by fossil fuel blocks. In most of the Colombian Amazon, the cost of extraction is higher than the cost of conservation.Recently, Colombia reaffirmed its commitment to Indigenous Peoples' rights and critical ecosystems by reintroducing a similar prohibition in Sierra Nevada, the site of the upcoming Conference on Transitioning Away from Fossil Fuels.



Other highly-biodiverse Global South countries have also taken steps in this direction. Mexico already has 100 million hectares of similar Safeguard Zones that prohibit fossil fuel expansion in critical areas; Guatemala recently ended oil extraction in the Mayan Biosphere Reserve; Belize banned offshore oil and gas; Laos ended all new licenses for coal mining until further notice; the Philippines restricted the exploitation of hydrocarbons in protected areas; and Costa Rica established a full moratorium on hydrocarbon expansion through to 2050. A notable effort to implement Fossil Free Zones is being led by parliamentarians across the Amazon basin who introduced legislation to extend Colombia's fossil ban across the whole region.

In the financial sector, 11 banks have applied various levels of financial restrictions to the oil and gas sector in the Amazon, recognizing the reputational and stranded asset risks of fossil fuel expansion into this area. There are also over 500 examples of sub-national and local facilities that have self-declared as fossil free zones. However, the strength and implementation of these multiple examples remains uneven in terms of political commitment and policy effectiveness.

d) How can a just, orderly and equitable transition best reflect the diverse realities of countries at different stages of development and with different degrees of dependence on fossil fuels?

The roadmap to transition away from fossil fuels must be anchored in the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC). This means structuring expectations explicitly: high-income, historically high-emitting producer countries should lead by phasing out fossil fuels first and fastest, including by ending new exploration and licensing, and by providing the financial and technical support to make the transition feasible for others. Reducing Global North consumption is equally essential. The roadmap should not treat the pace of transition as a matter of national discretion without regard to historical responsibility.

For developing countries, particularly those with high fiscal dependence on fossil fuel revenues, the transition is not simply an energy challenge but a development challenge. Enhanced international support is required: concessional climate finance, debt relief and restructuring, technology transfer, and capacity-building. Critically, this support must avoid creating new forms of debt dependency and enable countries to define their own transition priorities rather than inheriting externally designed conditionalities. Debt workouts linked to nationally defined phaseout pathways, roadmaps, and reparation mechanisms structured under the polluters-pay principle, can create the fiscal space necessary for genuine economic diversification. Ecuador's debt-for-nature swap, the Biocorredor Amazónico Fund, offers an insightful innovative financing model for Fossil Free Zones in the future.

The implementation of Fossil Free Zones in highly-biodiverse, developing countries can support development objectives. They help keep fossil resources with relatively high capital and operational costs in the ground, avoiding stranded asset risks, while contributing to the

protection of key ecosystem services that are fundamental to the bioeconomy, including Indigenous Peoples' traditional economies, the development of genetic resources, agroforestry, small-scale agriculture and sustainable tourism. FFZs are not administratively burdensome and in many cases can be implemented through existing legal and policy frameworks, and should thus be perceived as a policy choice with relatively low opportunity costs and significant social, environmental, and economic co-benefits for developing countries. They are also a pathway to strengthen the governance of the transition and enhance its coherence with other government efforts to protect biodiversity.

Further engagement and point of contact

At Earth Insight, we remain available to support the COP30 Presidency with further details, clarification, and technical input on the data, spatial analysis, and mapping underpinning this submission. We would welcome follow-up discussions or briefings to help inform ongoing deliberations and decision-making within the UNFCCC.

For further engagement with Earth Insight, please reach out to Juan Pablo Osornio, Engagement and Policy Director, at juanpablo.eu@earth-insight.org, and to Ignacio Arróniz Velasco, Senior Associate for Diplomacy, at ignacio.eu@earth-insight.org.