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COP30 Presidency Invitation to Submit Contributions to the COP 30 Presidency Roadmap on the Transition Away from Fossil Fuels in a Just, Orderly and Equitable Manner

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Advancing an Equitable Fossil Fuel Transition: A New Narrative

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Introduction

COP 28 and the subsequent implementation gap

While the COP 28 summit in Dubai secured a broad political signal from countries on the need to transition away from fossil fuels in energy systems, significant changes in national pathways and public and private-sector policies have been elusive, leading to frustration among governments, civil society and wider stakeholders on the lack of progress globally to implement this commitment.

Fossil fuels in the real economy vs climate ambition

A key tension to implement equitable fossil fuel transitions lies between the urgency of reducing fossil fuel use and the embeddedness of fossil fuels in economic and development outcomes for countries. In high-income consumer countries, affordable alternatives - particularly for power and transport - are largely available but transitions, where they are taking place, are too slow. Continued reliance on fossil fuels in those countries therefore cannot be justified from a climate justice perspective, which requires these countries to lead the phase-out of fossil fuel dependence.

In some developing countries, fossil fuel dependence is deeply intertwined with the challenge of ensuring reliable and affordable energy access and supporting industrialisation in the short to medium term; while recognising that over the long term, development gains may be eroded with risks of stranded economic structures and worsening climate impacts.

For producer countries, a differentiated analysis is crucial - with continued investment and growth in fossil fuel production by high-income producers proving immediately incompatible with climate justice and the Paris Agreement's goals. For developing country producers, longer timelines and specific support measures are needed to diversify sources of export revenue, domestic energy, and servicing of external debt.

Political gridlock

The key multilateral fora dealing with this agenda – the UNFCCC and the Paris Agreement – have had limited success in moving countries beyond rhetorical endorsement towards operationalising the outcomes of the first Global Stocktake, with persistent divisions between countries on climate finance and mitigation precipitating in discussions.

Moreover, global political narratives around climate ambition have often been framed in simplistic terms: dividing countries into "ambitious leaders" and "blockers". The so-called "ambitious" countries have tended to be more visible and vocal in international initiatives, often at politically tenuous moments at COP summits to trade-off against various demands. On the other hand, countries that do not foreground rapid phaseout commitments, and instead emphasise sequencing, flexibility, or national circumstances, are frequently framed as 'blockers'. Such narratives overlook the structural inequities embedded in the global climate regime and are not based on current trends of implementation, in particular efforts by many developing countries to undertake significant energy transitions despite limited international support.

Against this background, we attempt to identify key 1) narrative tensions that need to be resolved, and 2) strategic design guidelines to inform the development of a global TAFF Roadmap.

I. Updating narratives to resolve political deadlocks

1. An equitable transition away from fossil fuels are fundamentally a development challenge - not just a mitigation task

An equitable fossil fuel transition cannot be treated as a standalone objective detached from broader development challenges; it must be understood not as a narrow mitigation objective but as part of a broader transformation of energy, finance, and economic systems. Equitable fossil fuel transitions cannot be separated from broader political questions of development pathways, energy security, economic diversification, industrialisation, and competitiveness.

This is most acute in developing countries, which must prioritise the expansion of energy access, industrial capacity, and infrastructure while navigating constrained fiscal space, high cost of capital, and limited access to climate finance and technology. In many developing countries, energy demand continues to grow as governments seek to expand electricity access, industrial output, and achieve poverty eradication. For these countries, renewable energy deployment must precede and enable gradual fossil fuel decline. Prematurely suppressing energy demand or imposing uniform phaseout timelines risks undermining development objectives and political support for climate action.

Achieving this requires climate advocacy narratives that reflect real-world transition dynamics, engage constructively with the priorities of the Global South, and address the structural barriers that shape national energy choices. Equitable phaseout pathways therefore require:

- Enabling of rapid expansion of renewable energy and energy storage
- Investments in grids infrastructure, electrification of end-usage and green industrialisation
- Economic and trade diversification for fossil-fuel-dependent economies
- Social protection and job transition policies

Without these enabling conditions, fossil fuel phaseout risks becoming socially damaging and politically untenable.

2. Moving beyond the “ambitious versus blockers” framing

Recent developments challenge long-standing assumptions about where climate ambition is emerging.

Many developing economies are advancing energy transitions at significant scale using their own agency, and not guided solely by pressure to uphold global mitigation targets. They are doing so for economic competitiveness, energy sovereignty and uninterrupted access. China has become the dominant global

manufacturer of clean technologies and coal power generation fell for the first time last year[1]. India continues to rapidly expand renewable energy capacity while bringing coal generation growth to an end. Electric mobility deployment is accelerating across emerging markets such as Nepal and Ethiopia[2]. Collectively, countries in the BRICS group now produce more than half of global solar power[3]. These advances reflect the fact that in many cases, equitable fossil fuel transitions offer opportunities for countries to help achieve their development objectives, including co-benefits such as reducing the cost of energy, avoiding reliance on fossil fuel imports, curbing harmful air pollution, or building more resilient, diverse and dynamic economies.

At the same time, political backlash against climate policies has emerged in parts of the Global North, including the rise of far-right movements and growing resistance to energy transition policies[4]. For example, in the United States massive rollback of climate policies has taken place over the past two years, including the rollback of the Inflation Reduction Act. In the European Union, concerns of economic security and competitiveness have become central, leading some political and private sector groupings to question the ambition of key climate policies, such as the Emission Trading System, and to slow down the implementation of the ban of internal combustion engine vehicles.

Additionally, no country is safe from energy shocks and threats to supply chains following successive military interventions in Ukraine and now Iran.

Green energy alternatives are increasingly replacing fossil fuels in specific geographies and applications; global aggregate fossil fuel use continues to grow, though with peak demand likely in the coming years. However, the public debate around climate negotiations has often been shaped by narratives that divide countries into “ambitious leaders” and “blockers.”, and more particularly, this is associated with narratives of “high-ambition developed countries versus low-ambition developing countries”. These framings oversimplify complex political economy realities, implementation dynamics, and risk undermining solidarity among countries, particularly upholding of trust between Global North and South.

No country can credibly claim climate leadership while continuing to build new fossil fuel-producing or consuming projects domestically or abroad. At the same time, countries facing development constraints cannot be expected to undertake rapid phaseouts without enhanced international cooperation. Advocacy strategies must therefore recognise the role of emerging economies in driving technological and market shifts while also acknowledging the structural barriers they continue to face.

[1] Carbon Brief (2024). *Analysis: Coal power drops in China and India for first time in 52 years after clean energy records*. Available at: https://www.carbonbrief.org/analysis-coal-power-drops-in-china-and-india-for-first-time-in-52-years-after-clean-energy-records/
[2] Ember (2024). *The EV leapfrog: How emerging markets are driving a global EV boom*. Available at: https://ember-energy.org/latest-insights/the-ev-leapfrog-how-emerging-markets-are-driving-a-global-ev-boom/
[3] Ember (2024). *Solar in BRICS: Emerging economies now lead the world’s clean energy race*. Available at: https://ember-energy.org/latest-insights/solar-brics-emerging-economies-now-lead-the-worlds-clean-energy-race/
[4] Financial Times (2024). Available at: https://www.ft.com/content/b5e8d5ab-21cf-4b9b-98c7-4e236b95bb78

A more constructive framing would focus on four core questions:

- Who bears historical responsibility for emissions?[5]
- Who has the capacity to accelerate the transition that is already underway, at the most rapid pace without undue social and economic costs?
- Who is constrained by economic dependence on fossil fuels?
- Who needs what type of international support to accelerate the transition, while meeting both climate and development imperatives?

Reframing the debate in these terms can help shift attention toward equitable country-specific pathways along with a better understanding of international cooperation needs.

Moving beyond the "ambitious versus blockers" framing means establishing a narrative that recognises that most countries are committed to equitable fossil fuels transitions, as reflected in the near-universal endorsement of the Paris Agreement long-term goals at COP30 and trends already visible within country borders. It also implies that all countries can and should begin accelerating the transition away from fossil fuels - while acknowledging that what this entails will differ a lot across contexts. Crucially, not all forms of climate action will translate immediately into emission reductions, which will need to be delivered primarily by industrialised countries and others with the capacity to do so.

II. Design guidelines for a TAFF Roadmap that centers equity and development

1. Prioritise action and cooperation that addresses structural barriers to the transition

The pace of the global transition away from fossil fuels will ultimately depend on whether structural constraints faced by large developing countries are addressed. Some economies depend heavily on fossil energy supplies (including long-lived power generation infrastructure), on fossil-fuelled industries and employment, or on fiscal revenues and export earnings from fossil fuels. Too rapid a transition in countries with such dependence would be socially costly, affecting access to affordable energy, jobs, or public services.

The most dependent countries will therefore need more time to undergo just, orderly and equitable transitions; this does not mean delaying efforts but rather allowing more time for the overall transition process, beginning now, and amplifying the enabling conditions that will accelerate their transition. In contrast, other countries - including Global North countries - have diversified economies, energy systems and employment sources, meaning they can transition faster without social and economic disruption with the right policies in place.

High cost of capital remains one of the most significant barriers to renewable energy deployment in the Global South. The weighted average cost of capital (WACC) for renewable and industrial projects is typically two to three times higher than in advanced economies. According to IEA estimates, the WACC

[5] Centre for Science and Environment (CSE) (2024). *Equitable fossil fuel phaseout*. Available at: https://www.cseindia.org/equitable-fossil-fuel-phaseout-12490

for solar PV projects in India, Brazil and Indonesia was 9.5%, 11.25% and 8.25%, respectively, compared with 4.7 - 6.4% in advanced economies in 2022[6]. Debt burdens restrict the ability of developing countries to invest in climate and development - in 2023, low and middle-income countries excluding China spent USD 970 billion on external debt service, an amount almost equivalent to their annual climate finance needs of USD 1 trillion[7]. A restrictive trade regime that is not adapted to a climate-risked world, discourages domestic subsidies and local content requirements, seen as crucial for building domestic green industrial ecosystems, as they have been tools deployed by developed countries historically to build their own manufacturing[8]. Green technology access remains a barrier too, with 85% of industrial companies involved in green patent activity being concentrated in five countries - Japan (32%), China (19%), the US (18%), Germany (8%), and South Korea (8%). Industrial firms from developing countries (excluding China) hold less than 2% of green patents[9].

Climate finance commitments from developed countries have consistently fallen short of the scale required. Article 9.1 of the Paris Agreement, which commits developed countries to provide financial resources to developing countries, should play a role to enable equitable fossil fuel transitions. Strategies and advocacy on the transition away from fossil fuels must also be linked to broader reforms in the international financial architecture, trade rules, and technology access.

2. Support the creation of national roadmaps to implement equitable fossil fuel transitions

The development of national roadmaps is a key process to chart detailed visions of equitable fossil fuel transitions at the national scale[10]. This means recognizing the national level as the primary governance level of investigation and implementation for the transition away from fossil fuels: to ensure relevance given the specificities of the national context and to facilitate domestic ownership by the set of decisionmakers and stakeholders who will ultimately drive implementation.

Such national roadmaps are a tool for countries to use to understand enablers, barriers, opportunities and costs of equitable fossil fuel transitions in their context and to inform international cooperation needs, allowing every country to move as fast as it can based on its national circumstances and understanding countries with greater dependence on fossil fuels will need more time. They should not be an additional obligation for countries to meet but designed to serve domestic policymaking needs and be tailored to existing domestic processes.

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[6] Centre for Science and Environment (CSE) (2024). *Towards a new green world | Clean technology manufacturing: Navigating the green industrialization dilemma*. Available at: https://www.cseindia.org/towards-a-new-green-world-clean-technology-manufacturing-navigating-the-green-industrialization-dilemma-12923

[7] Centre for Science and Environment (CSE) (2024). *Factsheet: Debt's climate link*. Available at: https://www.cseindia.org/factsheet-debt-s-climate-link-12786

[8] Centre for Science and Environment (CSE) (2024). *An equitable trade and climate agenda*. Available at: https://www.cseindia.org/an-equitable-trade-climate-agenda-13056

[9] Centre for Science and Environment (CSE) (2024). *Towards a new green world | Clean technology manufacturing: Navigating the green industrialization dilemma*. Available at: https://www.cseindia.org/towards-a-new-green-world-clean-technology-manufacturing-navigating-the-green-industrialization-dilemma-12923

[10] Deep Decarbonization Pathways Initiative (DDP) (2024). *Making it happen: National pathways to net zero: Reconciling urgent action and transformational change*. Available at: https://ddpinitiative.org/ddp-annual-report-2024/

National roadmaps should:

- Include a detailed description of the sequencing of actions in each sector, capturing the specificities of national circumstances, including the reality of the current state of progress of the transition within each component of the national economy
- Provide information on the enabling conditions, including financial and technology-related, for the national transition away from fossil fuels to be consistent with key development and socio-economic priorities as defined by each country
- Explore key uncertainties and possible trade-offs and path-dependency, analyze risks and opportunities and reveal national and global enabling conditions,
- Be co-created by a critical mass of diverse national experts, stakeholders and decisionmakers to ensure relevance and ownership
- Be informed by science-based evidence and analysis at the national level, by cross-country learning and by international benchmarking

A compilation and consolidation of these national roadmaps into a structured cross-country analysis could be done as part of the Second Global Stocktake. Firstly, this could help reveal commonalities across countries, beyond the national specificities and help identify the underlying key drivers of transition away from fossil fuels consistent with the objectives of the Paris Agreement, and therefore providing concrete inputs on how to correct course. Secondly, it can also help clarify the global conditions required to support national transition away from fossil fuels, including dimensions related to enhanced international cooperation.

3. Ensure co-creation of the global TAFF Roadmap with the Global South so that equity and development are not sidelined

The growth centers of future fossil fuel consumption and subsequent greenhouse gas emissions are likely to be in developing countries. Effective advocacy on fossil fuel transitions must therefore engage deeply and thoughtfully with their priorities and perspectives, recognising how their different national circumstances shape their ability to undergo transition.

The Group of 77 and China represents more than 130 countries with diverse economic structures, energy systems, and political contexts. Immediate support for rapid phaseout plans for fossil fuels across the vast breadth of the G77 will justifiably be elusive and should not be demanded.

Building broad support for equitable transitions requires sustained dialogue within this group and supporting leadership of the Global South in shaping the journey to equitable fossil fuel transitions. Previous successes within the climate negotiations, such as the establishment of the Loss and Damage Fund and progress on the Just Transition mechanism, demonstrate the value of sustained engagement with developing country negotiators.

We must prioritise consultation, trust-building, and collaborative agenda-setting with Global South partners in shaping future transition proposals, rather than inserting exclusive proposals by select groups of countries (termed by some as “coalitions of the willing”) and expecting immediate buy-in from the G77.

Issue-based coalitions can help bring together countries at the regional level, within the Global South, or across North–South divides, around shared interests - where specific cooperation can help address structural barriers and unlock progress. But a global fossil fuel transition proposal that ignores finance, sidelines development priorities, or delegitimises the concerns of the Global South risks failing both politically and in practice.

An equitable fossil fuel transition roadmap must be co-created, differentiated, and adequately resourced. It also needs to be action-oriented, which requires it to be granular, fuel-by-fuel, sector-by-sector as shaped by countries' domestic buy-in. Only through such an approach can the global community accelerate the transition to low carbon energy systems while ensuring that climate action remains compatible with sustainable development.

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Further resources

Centre for Science and Environment (CSE) (2024). *Equitable fossil fuel phaseout*. Available at: https://www.cseindia.org/equitable-fossil-fuel-phaseout-12490

Centre for Science and Environment (CSE) (2024). *Towards a new green world | Clean technology manufacturing: Navigating the green industrialization dilemma*. Available at: https://www.cseindia.org/towards-a-new-green-world-clean-technology-manufacturing-navigating-the-green-industrialization-dilemma-12923

Centre for Science and Environment (CSE) (2024). *An equitable trade and climate agenda*. Available at: https://www.cseindia.org/an-equitable-trade-climate-agenda-13056

IDDRI (2024). *Paris+10: Diagnosis looking back, look forward*. Available at: https://www.iddri.org/en/publications-and-events/working-paper/paris10-diagnosis-looking-back-look-forward

Deep Decarbonization Pathways Initiative (DDP) (2025). *A decade of national climate action: Stocktake and the road ahead*. Available at: https://ddpinitiative.org/ddp-report-2025/

Deep Decarbonization Pathways Initiative (DDP) (2024). *Making it happen: National pathways to net zero: Reconciling urgent action and transformational change*. Available at: https://ddpinitiative.org/ddp-annual-report-2024/

Muttitt, G. and Winkler, H. (2026). *Transitioning away from fossil fuels in a just, orderly and equitable manner: A quantitative overview of countries' different national circumstances, fossil fuel dependence and opportunities for flourishing post-fossil economies*. PRISM Working Paper 2026-2. Available at: https://commerce.uct.ac.za/sites/default/files/media/documents/commerce_uct_ac_za/869/prism-working-paper-2026-2-muttitt-winkler.pdf

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