Submitting author:

Amanda Motta Schutze

Fundação Getulio Vargas (FGV) – EESP / FGV Clima

Email: amanda.schutze@fgv.br

Submitted by: Fundação Getulio Vargas (FGV)
Date: March 31, 2026

Contributions to COP30 Presidency Invitation on Transition Away from Fossil Fuels in a Just, Orderly and Equitable Manner

I. Critical Barriers to Transitioning Away from Fossil Fuels

A comparative analysis of national and international energy planning instruments reveals that barriers to the transition are predominantly systemic rather than technological. In the context of emerging economies such as Brazil, the following stand out:

From an institutional and governance perspective, fragmentation persists across sectoral policies covering energy, climate, industry, infrastructure, and social development. Even where interministerial coordination mechanisms formally exist, their practical operationalization remains limited, undermining the coherence and predictability of the regulatory environment. The absence of long-term integrated planning with monitorable targets constitutes one of the most critical structural barriers identified.

From a financial standpoint, there is a lack of adequate economic instruments to mobilize private capital toward emerging technologies and higher-risk projects. The absence of consolidated regulated carbon markets, the limited availability of blended finance mechanisms, and the persistence of fossil fuel subsidies distort price signals and discourage low-carbon investment.

At the technological and infrastructure level, logistical and regulatory bottlenecks delay the scale-up of renewable energy sources, green hydrogen, bioenergy, and energy storage systems. Inadequate environmental licensing processes for emerging technologies, such as offshore wind, hybrid power plants, and hydrogen projects, represent a concrete barrier to advancing the transition at the required pace.

Finally, the social dimension of the transition is frequently underestimated. The unequal distribution of transition impacts on fossil fuel-dependent regions, asymmetries in energy access among rural and traditional communities, and the lack of adequate professional training for the new sectors of the low-carbon economy constitute socioeconomic barriers that, if left unaddressed, undermine both the legitimacy and the long-term sustainability of the process.

II. Levers for Accelerating Implementation

The Brazilian experience and the analysis of international instruments identify an interconnected set of levers with high transformative potential.

Strengthening long-term integrated energy planning, with clear cross-sectoral targets and a long-term horizon, is a necessary condition for guiding investment decisions and reducing regulatory uncertainty. In Brazil, the National Energy Transition Plan (Plante), still under elaboration, represents a concrete opportunity to consolidate such an instrument, provided it is aligned with robust monitoring mechanisms, periodic review cycles, and effective federal coordination.

Carbon pricing, through regulated emissions trading systems or equivalent fiscal instruments, is consistently identified by bodies such as the IEA and IRENA as one of the most cost-efficient levers for guiding investment, internalizing externalities, and generating revenues that can be directed toward the protection of vulnerable groups and the financing of the transition. Brazil is advancing the structuring of its Greenhouse Gas Emissions Trading System, and the consolidation of this mechanism represents a significant window of opportunity.

The mobilization of climate finance, through national funds fed by oil and gas revenues, multilateral mechanisms, and blended finance instruments, is essential to scale technologies still in the maturation phase and to enable projects in emerging economies. The creation of an Energy Transition Fund, envisaged in the Presidential Decree of December 2025, aligns with this direction.

Green industrial policy, oriented toward the decarbonization of energy-intensive sectors, the strengthening of domestic value chains, and the development of domestic technological capabilities, constitutes a central lever for transforming comparative advantages, such as the consolidated biofuels base, solar and wind potential, and biomass resources, into genuine international competitive leadership. Programs supporting large-scale demonstration projects, certification standards, and green public procurement are instruments that can anchor this strategy.

III. Country Experiences, Best Practices, and Lessons Learned

Brazil has accumulated relevant experiences that can contribute to the global debate on energy transition. The trajectory of building the biofuels industry, from the Proálcool program to RenovaBio, demonstrates that long-term public policies, combined with progressive blending mandates and sustainability certification mechanisms, are capable of transforming an entire sector and creating globally competitive value chains.

The remarkable expansion of solar and wind energy over the past decade, enabled by competitive auctions and long-term contracts, illustrates the effectiveness of well-designed market mechanisms for attracting private investment and accelerating cost reduction. Brazil became one of the world's largest onshore wind and distributed solar photovoltaic markets within a short period of time.

At the same time, the Brazilian experience also offers lessons on the risks of a poorly coordinated transition. The expansion of distributed solar generation, for example, created tariff distortions that penalize consumers without access to solar panels, indicating that the pace of technological transition must be accompanied by regulatory reforms capable of ensuring systemic equity.

Finally, the National Energy Transition Policy (PNTE), supported by the National Energy Transition Forum (Fonte) as a tripartite dialogue space among government, the productive sector, and civil society, offers a participatory governance model for the transition that can be shared with other developing countries.

IV. Differentiated Pathways and Just, Equitable Transition

FGV Clima emphasizes that any global roadmap on transitioning away from fossil fuels must explicitly recognize the diversity of national trajectories and the need for differentiated principles of responsibility. Countries that already have predominantly renewable energy matrices, such as Brazil, face fundamentally different challenges from those highly dependent on coal or oil, and targets and instruments must reflect these differences.

Just transition must not be treated as a secondary or adjectival dimension of the process. It must be the structural axis of policies, incorporating from the outset protection mechanisms for workers and communities affected by the reduction of fossil fuel production, professional retraining programs, guarantees of universal access to clean energy, and mechanisms for the participation of indigenous peoples and traditional communities in decision-making processes.

International climate finance remains an indispensable condition for developing countries to implement ambitious transitions without compromising poverty reduction and economic development objectives. The COP30 Presidency Roadmap will have greater impact if it explicitly includes concrete mechanisms for the mobilization and delivery of this finance, including through the review of commitments made but not yet fulfilled by developed countries.