TALANOA INSTITUTE'S CONTRIBUTIONS REGARDING THE COP 30 PRESIDENCY ROADMAP ON THE TRANSITION AWAY FROM FOSSIL FUELS IN A JUST, ORDERLY AND EQUITABLE MANNER

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

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

Until the outbreak of recent oil-driven geopolitical tensions involving the United States, Venezuela, and Iran, the primary argument against phasing out fossil fuels was grounded in energy security, understood as the need to ensure abundant, reliable, and affordable energy to sustain economic activity. Since then, energy security has increasingly been reframed as a rationale for accelerating the transition away from fossil fuels, as reducing exposure to the inherent geopolitical volatility and market instability of the fossil fuel industry is now seen as a strategic imperative, even as the oil and gas sector continues to advocate for expanded subsidies and investment.

Structural constraints nevertheless persist, particularly the economic and institutional dependence of producer countries on petroleum activities.

In the developing world, the energy transition faces barriers that extend beyond fuel substitution and require a systemic shift. The phase-out of fossil fuels must be addressed both as a non-negotiable obligation under international climate frameworks and as a core development strategy. A key obstacle lies in the persistence of transitional narratives around fossil-based alternatives, most notably the continued framing of natural gas as a "transition fuel," which in practice reinforces long-term dependence on non-renewable systems and delays effective decarbonization. Similarly, carbon capture and storage technologies risk entrenching fossil infrastructure rather than enabling its phase-out.

Fiscal dependence constitutes another central barrier. Governments rely on fossil-related revenues to fund essential public services, while simultaneously subsidizing the sector through tax exemptions, preferential credit, and fiscal incentives. This creates a structural political dilemma: reducing fossil fuel production places pressure on public revenues, whereas subsidy reform imposes visible and often regressive social costs. More broadly, many developing economies remain locked into carbon-intensive fiscal and financial

systems, reinforced by persistent fossil fuel subsidies that distort market signals and undermine the competitiveness of renewable energy.

The absence of clear and binding national transition roadmaps further weakens policy credibility and predictability.

In this context, institutional capture emerges as a critical constraint. It is not merely a matter of episodic influence, but a structural phenomenon sustained by financial resources and entrenched linkages with state institutions. The fossil fuel industry actively shapes policy formulation, participates in national delegations in international negotiation fora, and influences the boundaries of public debate, including through support for disinformation and climate denial. As a result, it exerts significant influence over regulatory frameworks, fiscal regimes, and investment priorities, effectively participating in the design of the rules meant to govern it.

This dynamic gives rise to a pattern of decision-making capture, whereby energy transition policies are often conditioned by the extent to which fossil fuel companies are willing to concede on emissions reductions, even when such positions diverge from scientific evidence and the broader public interest. Public opinion, however, is increasingly aligned with stronger accountability. A 2024 survey across 22 countries, including 17 G20 members, found that 72 percent of respondents support criminalizing corporate decisions that knowingly cause widespread and long-lasting harm to the climate.

Ultimately, in physical terms, the infrastructure for the production, transport, and consumption of oil and gas remains fully operational, deeply embedded across economies, and designed to operate for decades. This creates a powerful inertia effect, as premature decommissioning entails significant economic losses. Mechanisms for the managed early retirement of carbon-intensive assets, such as those being tested in parts of Asia, are therefore essential to mitigate potential economic and social disruptions during the transition.

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

On the economic and fiscal front, two pathways stand out.

One is the creation of new fiscal bases linked to the transition. In this regard, fostering the expansion of clean energy value chains capable of generating revenue, employment, and public income is essential. Without such substitution, the transition is likely to be perceived

as a net loss and stall. The taxation of greenhouse gas emissions from fossil fuels can also play an important role, both as a source of revenue and as a concrete incentive for decarbonization. However, it must account for Scope 3 emissions, particularly in major producing developed countries, where territorial emissions do not reflect the combustion of exported oil. More urgent, however, is addressing fossil fuel subsidies. The gradual reform of these subsidies, combined with social compensation mechanisms to mitigate impacts on the cost of living, constitutes a critical pathway for advancing the transition.

From an institutional perspective, the key issue is the state's capacity to resist capture and coordinate long-term change. In this regard, transparency mechanisms related to subsidies and lobbying activities, broader stakeholder participation, regulatory reforms, and the strengthening of state capacity are fundamental.

At the social level, mechanisms that foster acceptance of the transition and erode the social license of fossil fuels are equally important. The transition tends to accelerate when it is perceived as fair, which requires policies to protect workers and regions dependent on fossil fuels, as well as the visible distribution of benefits such as lower energy costs and improved quality of life. Without this distributive dimension, high political costs are likely to hinder progress. At the same time, the erosion of the social license of fossil fuels depends on shifts in public perception and legitimacy, which can be driven by social pressure, judicial decisions, stricter regulation, and clear political signaling.

From a diplomatic standpoint, one pathway is paramount: the establishment of coordinated and action-oriented willing coalitions, notably through the formation of a group of ambitious countries focused on practical means of implementation. Such a grouping could serve as a platform for enhanced multilateral coordination, enabling the alignment of policy approaches, the articulation of common positions in international fora, as well as the joint development of solutions to shared structural challenges

In particular, strengthened South-South cooperation is essential, allowing developing countries to provide mutual support, exchange best practices, and disseminate context-appropriate policy innovations, such as social and environmentally responsible biofuels, thereby reducing implementation costs and risks. This cooperative framework can also facilitate coordinated enhance pressure to phase-out-targeted climate finance, including concessional instruments, guarantees, and blended finance structures, while promoting greater transparency and institutional capacity.

Equally important is the role of presidential diplomacy in elevating and sustaining political momentum for the phase-out agenda. Direct engagement among heads of state and government can signal high-level political commitment, generate peer pressure among

leaders, and anchor the transition as a strategic priority within the international system. At the domestic level, such leadership is critical to aligning ministerial portfolios under a unified political mandate, ensuring that energy, finance, industry, and foreign policy institutions operate cohesively toward phase-out objectives.

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

The literature shows that transition policies are often designed to preempt political resistance before it consolidates. Rather than beginning with measures that impose immediate costs, such as carbon pricing or subsidy removal, these policies tend to prioritize the creation of visible and near-term benefits. This was the case with several policies implemented at the U.S. state level that enabled the rapid expansion of renewables, as well as at the federal level under the Biden–Harris administration through the *Inflation Reduction Act (IRA)*. These efforts, however, have not always demonstrated political resilience in the face of organized backlash from the fossil fuel industry and ideological opponents. In some cases, such as Arizona, regulatory capture occurred; in others, such as Kansas, politicization eroded supportive coalitions; and in Ohio, policies were reversed in favor of coal subsidies amid corruption scandals. These cases underscore that the success of the transition depends not only on sound technical design, but also on the capacity to sustain policies over time in the face of organized opposition.

From a physical standpoint, as noted above, the challenge lies in the inertia of a system built to operate for decades. In this context, mechanisms for the early retirement of carbon-intensive assets become central. Experiences such as just transition programs in Southeast Asia, including Indonesia's Coal Retirement Roadmap, demonstrate that it is possible to structure financial packages to decommission plants ahead of the end of their economic life through concessional finance, public guarantees, and multilateral participation.

(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?

A just transition is not one that follows a uniform pathway for all. There is no common starting point among countries, only a shared destination: net zero emissions by mid-century, as advocated by the best available science and international commitments.

Recognizing these differentiated starting points is essential. In this regard, clearly mapping which countries produce the most, are most fiscally dependent on oil, and emit the most

through fossil fuel combustion can be highly useful for designing a global roadmap, particularly in identifying a sequencing of production phase-out responsibilities. The most meaningful contribution of such a roadmap, however, lies in identifying pathways to remove barriers to the expansion of renewable energy, such as curtailment losses, as well as advancing the decarbonization of transport and industrial sectors.

The notion of "orderliness" can be misleading, as it suggests a level of control over the transition that does not fully reflect its complexity. While avoiding disruptive shocks is clearly desirable, caution is warranted against treating roadmaps — whether global or national — as instruments of control, as though a transformation of this magnitude could be managed solely through planning. Their value lies instead in making transition pathways explicit, compelling governments to confront timelines that are often deferred, exposing trade-offs that tend to remain implicit, and rendering visible the finite horizon of current economic models.

Industrial policies are central to enabling this differentiation in practice. Through actively shaping comparative advantages into carbon-free economic well-being, governments must focus on supporting the development of low-carbon value chains that generate employment, fiscal revenues and technological capabilities. This includes targeted support for renewable energy manufacturing, green hydrogen, sustainable fuels, and critical minerals processing, alongside local content requirements and innovation incentives.

Well-designed industrial policies can further address structural barriers such as infrastructure gaps and technological dependency. Crucially, for developing countries, such policies also provide a strategic pathway to reduce exposure to the geopolitical volatility and price instability inherent to fossil fuel markets. The development of domestic clean energy industries, combined with economies of scale stemming from industrial and service clustering, can enhance energy self-sufficiency, stabilize supply all whilst reducing vulnerability to external shocks. In this sense, industrial policy goes beyond supporting the transition; it reframes it as a vehicle for economic resilience and strategic autonomy, enabling countries to move away from oil-dependent development models while securing a more stable, diversified, and domestically anchored energy system.