OECD submission to the COP 30 Presidency Roadmap on the Transition Away from Fossil Fuels in a Just, Orderly and Equitable Manner

The Organisation for Economic Co-operation and Development (OECD) is hereby responding to the 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 (*TAFF Roadmap*[1]).

The OECD is an international organisation comprised of 38 member countries that works to build better policies for better lives. Our mission is to promote policies that will improve the economic and social wellbeing of people.

The OECD Development Centre brings together policymakers from countries of all regions and income levels, including major emerging economies (Brazil, India, Indonesia, People's Republic of China and South Africa). They collaborate on an equal footing to build mutual understanding and find paths to strong, shared and green development.

Together with governments, policymakers and citizens, we work on establishing evidence based international standards, and finding solutions to social, economic and environmental challenges. From improving economic performance and creating jobs to fostering strong education and fighting international tax evasion, we provide a forum and knowledge hub for data gathering and analysis, exchange of experiences, best-practice sharing, and advice on public policies and international standard-setting.

This submission highlights relevant OECD work and initiatives that could help to inform the process of elaborating *the TAFF Roadmap. It provides answers to the questions raised in the* COP30 President's call for submissions.

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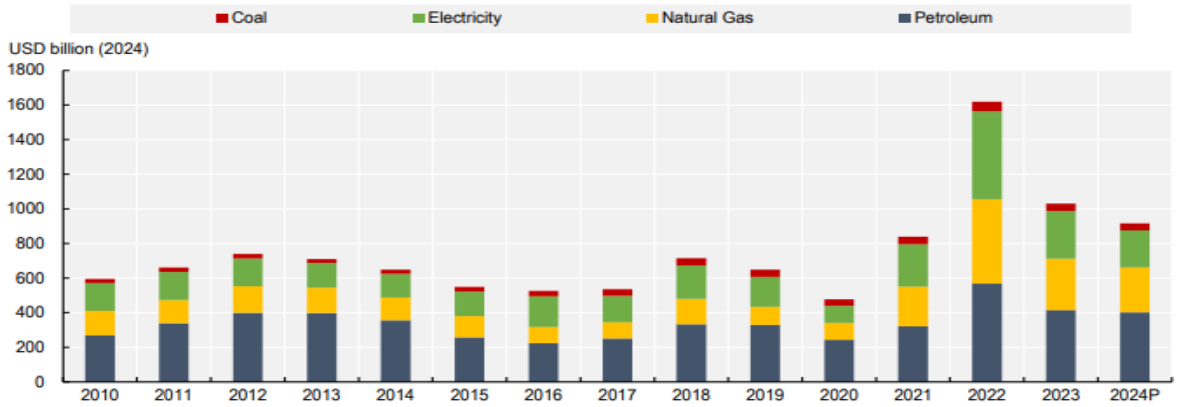
[1] We understand there are calls for "equitable fossil fuel transitions" (EFFT) to be the preferred acronym. For the purposes of this submission, we have used the TAFF acronym to align with the language of the COP 30 Presidency.

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

A central barrier to the transition away from fossil fuels is the continued scale of support for fossil fuels. The 2025 OECD Inventory of Support Measures for Fossil Fuels shows that support remains elevated relative to historical averages. This is despite a decline in the fiscal cost of government support from USD 1.03 trillion in 2023 to USD 0.92 trillion in 2024 due to the reduction or removal of emergency support measures introduced in 2022-23. Support is still overwhelmingly concentrated on fossil-fuel consumption that accounted for 84.2% of the fiscal cost of support in 2024.

Figure 1. The fiscal cost of support for fossil fuels remains high despite a continued decline from its 2022 peak



Note: See OECD, 2025 for more information, including comparison with previous updates of the inventory.
Source: OECD, 2025.

The work of the OECD Development Centre shows that the fiscal burden from fossil fuel support can be particularly acute in developing countries. The combination of fossil fuel support and distorting prices with high public debt, constrained budgets and limited access to affordable finance, entrench reliance on fossil fuels and slow the green transition. Persistent misaligned incentives—either in the form of government support for fossil fuel production and/or consumption, or the lack of adequate carbon--pricing policies—alter the relative competitiveness of fossil fuels versus cleaner technologies, undermine policy effectiveness and impede the reallocation of capital toward cleaner technologies. At the same time, as subsidised energy prices are often part of the social contract, especially in fossil fuel-producing developing countries, abrupt interventions can lead to social unrest and political instability, requiring careful management OECD, 2022; OECD, 2025).

When considering the joint impact of fossil fuel support and carbon pricing instruments, broader decarbonisation incentives remain weak and uneven. In 2023, a positive Net Effective Carbon Rate (Net ECR[2]) covered only 44.8% of GHG emissions and the average Net ECR had decreased from EUR 18.6/tCO2e in 2021 to EUR 14.9/tCO2e in 2023. Moreover, when considering both pricing and non-pricing

[2] The OECD Net ECR measures the strength of the decarbonisation incentives implemented through various carbon pricing policies, including direct budgetary transfers for fossil fuels, fuel excise taxes, carbon taxes, and ETS permit prices; OECD (2025), *Effective Carbon Rates 2025: Recent Trends in Taxes on Energy Use and Carbon Pricing*, https://doi.org/10.1787/a5a5d71f-en.

instruments, evidence shows that climate action has stalled since 2020, and significant disparities persist across countries in both the adoption and the stringency of climate policies. This uneven policy landscape weakens the effectiveness of climate efforts and heightens the risk of carbon leakage, as emissions intensive activities may shift toward jurisdictions with less stringent climate policies and higher fossil fuel support (Climate Action Monitor, 2025). 2

In emerging and developing countries, high upfront CAPEX and financing costs and infrastructure gaps for clean energy and industry decarbonisation affect the pace and scale of the transition away from fossil fuels. Faced with rapid demographic growth, urbanisation and burgeoning demand for energy, emerging and developing economies rely heavily on cheap access to fossil fuels for power generation and industry. This is coupled with inadequate power networks, and significant gaps in technology, capacity and financing that could lock them into costly high-carbon development pathways. Policy misalignments that delay technology development and diffusion combined with lack of rules for decommissioning/repurposing assets (e.g. for renewable hydrogen or captured CO_2 transport) raise transaction costs and deter timely retirement or conversion of legacy infrastructure. Power sector bottlenecks—grid constraints, monopolistic structures, weak utility finances, and slow renewables integration—contribute to slowing down industry decarbonisation (OECD, 2022).

Geopolitical disruptions have further exacerbated the uncertain outlook for the role of oil and gas in the future energy mix and the speed of the transition, adding further uncertainty for policymakers and investors. Geopolitical tensions, energy security concerns, and fossil fuel procurement diversification strategies are reshaping fossil fuel energy trade flows, obscuring the anticipated structural decline in fossil fuel demand over the medium to long term (OECD, 2022).

Heightened oil and gas price volatility undermines revenue predictability and limits the ability of producing developing countries to plan for a just and inclusive energy transition. Producer economies face rising risks of stranded assets and sovereign credit downgrades as global demand plateaus and import conditions tighten. This increases producing countries' exposure to transition risks, especially where modelling capacity is low and understanding of evolving market dynamics is limited. Tightening import requirements and other trade-related climate measures with spillover effects may also jeopardise export competitiveness if not accompanied by adequate technology and capacity building support for cost-effective emission reduction.

Legal and contractual legacies—such as stabilisation clauses, take or pay provisions, and expansionist mandates of national oil companies—further lock in capital and restrict governments' ability to realign investments and regulation with low-carbon pathways. Weak cross government capacity for risk assessment, scenario modelling, and revenue management further slows the shift from fossil fuel rents toward broader, more resilient tax bases (OECD, 2022; OECD, 2024*).*

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

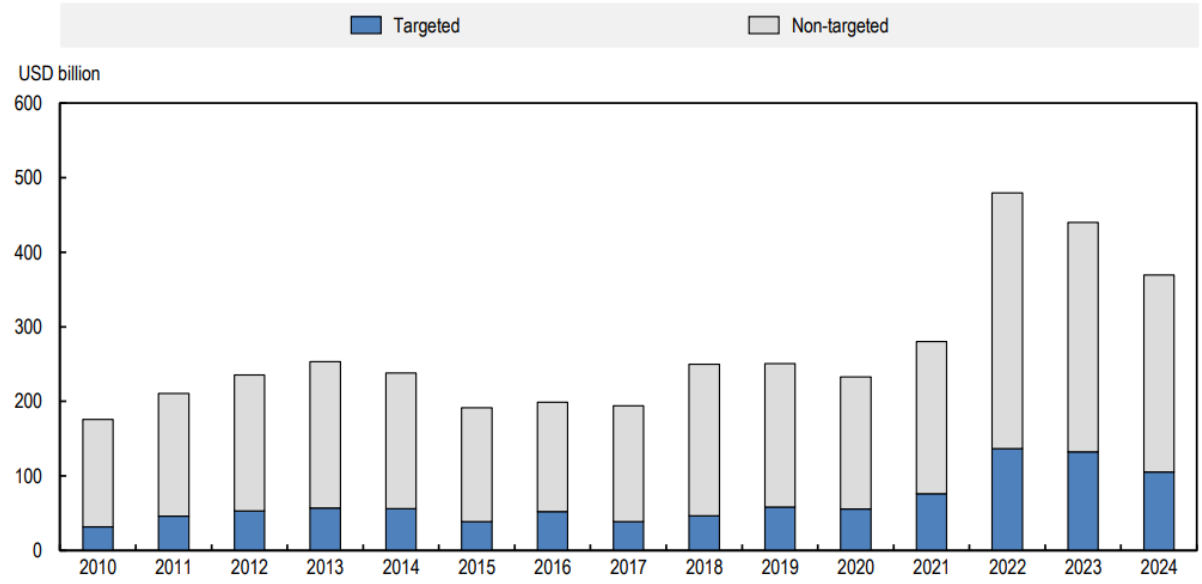
Reforming support for fossil fuels with improved targeting and phasing out inefficient measures. Such reforms could release valuable fiscal resources that could be redirected towards other government priorities, foster innovation to improve energy efficiency and reduce dependence on fossil fuels, decreasing exposure to energy price shocks (OECD, 2025) (**Figure 4**). In 2024, untargeted measures to support fossil fuel consumption untargeted accounted for 71.4% of the fiscal cost of support measures. Targeted support measures could include, for example, direct income support to protect vulnerable households at a lower fiscal cost. For firms, support could be directed toward those firms that have a viable business model but are facing temporary liquidity or solvency pressures due to energy price shocks (OECD, 2025).

Implementing a process of structural transformation. An equitable fossil fuel transition requires a long-term vision which integrates climate action with development objectives supported by a multi-stakeholder governance process and the careful sequencing of complementary and mutually reinforcing policy measures. Long-term integrated planning, incorporating interconnected energy, climate, environmental, macro-economic fiscal, labour, skills, industrial, infrastructure and transport policies is key to aligning short and mid-term policy choices with long-term objectives, increasing policy coherence and supporting implementation. Successful transition planning also requires articulating the benefits of low-carbon development models, which can outlast election cycles and changes in government administrations. Mainstreaming low-carbon and climate resilience development strategies in national development planning could further integrate effective measurement, reporting and verification (MRV) mechanisms to regularly take stock of progress, while remaining sufficiently flexible to adapt to changing circumstances and the emergence of new technologies (OECD, 2022).

Delivering coherent, well-designed and carefully sequenced policy mixes. Across all sectors, around 70% of emissions breaks were associated with a mix of policies, compared with just 30% triggered by stand-alone instruments. Well-designed policy mixes can significantly enhance overall policy effectiveness, reduce unintended consequences, and support a more equitable, robust, and durable transition to a low-carbon economy (Climate Action Monitor, 2025).

Figure. 3. The vast majority of measures supporting the consumption of fossil fuels remain untargeted

Fiscal cost of support measures for fossil fuel in OECD and partner countries (49 countries).



Note: Targeted support measures are defined as benefitting a specific category of households, firms, or energy users.
Source: Source: OECD, 2025.

Expanding carbon pricing coverage to strengthen decarbonisation incentives. The Net ECR framework underscores that direct support for fossil fuels operates like a negative carbon price, counteracting the effect of carbon taxes, emissions trading systems and fuel excise taxes (OECD, 2025). Accelerating implementation therefore requires not only reducing fossil fuel support but also improving the coverage and strength of positive price signals. The revenues from carbon pricing can be used to cushion

negative impacts on household budgets (e.g. higher energy bills due to carbon pricing) and to lower other distortionary taxes (e.g. labour taxes).

Improve transparency and coordination of supply-side and demand-side measures within and across countries. In the absence of such an approach, mismatches in fossil fuel supply and demand, exacerbated by geopolitical tensions, could create disruptions in both physical and financial markets across developed and developing countries during the transition: if production drops faster than demand, prices might go up, whereas if demand declines faster than production, revenue falls and stranded assets are likely, with increased exposure for asset owners. The prospect of this volatility requires economic policies and measures for robustness, to anticipate and cope with such turbulence (OECD, 2022).

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

The Equitable Framework and Finance for Extractive-based Countries in Transition (EFFECT) was developed by the OECD Development Centre in close partnership with developing economies and launched at COP27 (OECD, 2022). EFFECT provides a menu of policy options and practical guidance for policymakers in fossil fuel producing and mineral-rich developing countries to chart just, realistic and sustainable transition pathways. It accounts for the need to address short-term pressures, particularly energy access, affordability, security, and economic competitiveness without losing sight of long-term structural transformation and decarbonisation objectives. EFFECT is structured around three interrelated pillars (**Box 1**).

Box 1: The Equitable Framework and Finance for Extractive-based Countries in Transition (EFFECT)

Pillar 1: Decarbonising extractives and managing uncertaincies is framed by the uncertain outlook for fossil fuels in a global decarbonised economy, renewed energy security concerns and the risks associated with continuous reliance on fossil fuels.

Pillar 2: Sustainable fossil fuel exit strategies and just transition plans provide concrete recommendations for policymakers to navigate the implications of long-term trends in declining fossil fuel demand. It addresses its impact on market access opportunities, workers and legacy infrastructure – and therefore on developing countries' public budget, labour market, and overall economic, fiscal and political stability.

Pillar 3: Economy-wide decarbonisation roadmaps offer approaches to correct misaligned incentives and price negative externalities of carbon-intensive technologies and modes of production, while preserving affordability and competitiveness. It also provides guidance on "how" fossil fuel based developing economies can seize the transformational opportunities associated with revenue substitution and recycling, economic diversification, the development of low-carbon value chains, green industrialisation and the sustainable use of critical minerals for low-carbon technology manufacturing.

EFFECT is also a vehicle for forging new models of transition cooperation to advance the 2030 Agenda for Sustainable Development and, in particular, support the achievement of Sustainable Development Goals 7 (Ensure access to affordable, reliable, sustainable and modern energy for all); 8 (Promote inclusive and sustainable economic growth, employment and decent work for all); 9 (Build resilient infrastructure, promote sustainable industrialization and foster innovation); 12 (Ensure sustainable consumption and production patterns); 13 (Take urgent action to combat climate change and its impacts); and 17 (Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development).

EFFECT identifies the following best practices and lessons learned to support equitable fossil fuel transitions, especially for developing countries heavily reliant on fossil fuels for revenue generation, energy needs, infrastructure and jobs:

Managing transition risks through early, system-wide planning. A whole-of-economy approach to transition risk assessment, integrating macroeconomic modelling, scenario analysis and stress-testing across key sectors can anticipate shocks before they materialise and help manage transition risks (e.g. projected declining long-term demand, high price volatility, tightening climate policies, and in some instances heavy fiscal dependence on fossil fuel revenues). Experience shows that countries that plan proactively by mapping vulnerabilities and sequencing reforms are better positioned to maintain macroeconomic stability and strengthen their competitiveness, while gradually reducing reliance on fossil fuels.

Decarbonising existing fossil fuel systems as a transitional imperative. Methane abatement represents the most immediate and cost-effective mitigation opportunity across oil, gas and coal value chains (OECD, 2024). Regulatory clarity and reliable monitoring, reporting and verification frameworks—supported by satellite data, leak detection and repair programmes, and public disclosure—are essential to ensure compliance and build investor confidence. **Colombia** is the first Latin American country to regulate methane from upstream oil and gas operations, setting obligations for operators to submit emissions baseline to the regulator. The baseline serves as a reference for the comparison and continuous improvement of methane emissions reductions in subsequent years. Following the introduction of methane regulations in the province of **Alberta (Canada)**, a 2022 study showed that these regulatory measures had reduced methane emissions from approximately three million cubic metres to a near-zero level over a five-year period without significantly impacting production. Similarly, **Nigeria**'s sharp decline in routine flaring of associated gas from 60% to 6% demonstrates how combining legal obligations, penalties, utilisation incentives and infrastructure partnerships creates a strong enabling environment for decarbonisation (OECD, 2022). These cases show that decarbonisation of fossil fuel operations can free up resources, protect revenues and strengthen domestic capacities during a managed fossil fuel decline, mitigating transition risks while preparing economies for structural change (OECD, 2024).

Aligning national oil companies' (NOCs) mandates and investment strategies with long-term transition pathways. Many NOCs are currently exposed to high-cost, long-cycle projects that are increasingly vulnerable to stranding as global decarbonisation efforts accelerate. Lessons from EFFECT show that governments can shift NOCs' behaviour by aligning mandates with national climate and development strategies, shortening investment cycles, enhancing oversight, and integrating climate-related considerations into licensing, fiscal frameworks and performance metrics. Strengthening transparency and limiting debt accumulation are also essential to avoid situations in which governments are forced into fiscal bailouts that further delay transition (OECD, 2022).

Ensuring a just and inclusive transition that protects workers and communities. Fossil fuel-intensive regions often have concentrated employment, limited economic diversification and strong cultural ties to the sector. Transition planning must therefore begin with territorial assessments that map risks to specific regions, identify affected groups—including informal workers—and anticipate socioeconomic impacts. For example, **Spain**'s Just Transition Agreements combine early communication, structured social dialogue, compensation for affected workers, retraining programmes and local development plans. By doing so, the government was able to close coal mines while maintaining political and social support (OECD, 2022).

Repurposing fossil fuel infrastructure to reduce transition costs. Converting existing pipelines, storage facilities and industrial sites for new uses—such as hydrogen transport or carbon capture, utilisation and storage (CCUS)—can significantly reduce capital expenditures, limit stranded assets and create new employment opportunities. Effective repurposing requires early feasibility assessments, clear liability rules, coordinated regulatory frameworks and strong public-private partnerships. Lessons from the **United Kingdom**'s emerging "cluster-based" industrial decarbonisation strategy show that connecting

heavy industry with shared CCUS infrastructure can unlock economies of scale and reduce risks for investors (OECD, 2022). Integrating repurposing considerations before decommissioning begins is crucial, as is the establishment of ring-fenced funds that ensure responsible environmental remediation when assets are retired. **India** is pursuing a transition strategy that seeks to minimise disruptions by reusing fossil infrastructure as the backbone of low carbon scaleup. Instead of shutting refineries, pipelines, gas grids, and fuel retail networks, India is reengineering them to carry low-carbon fuels, capture emissions, and anchor new clean energy value chains (Garg A., Patange, O., Vishwanathan S.S., Nag, T., Singh, U., and Avashia V., 2024).

Assessing skills transferability and amplifying synergies through active labour market policies. As many technical, engineering, operational and safety-related competencies in hydrocarbons have direct applications in renewable energy, power systems, industrial decarbonisation, energy efficiency and environmental remediation, skills transferability can significantly reduce economic and social transition costs. Such overlaps could be systematically assessed at national and regional levels, allowing governments to design transition plans that prioritise redeployment rather than replacement of the workforce. The experience of **Spain's** coal regions, for example, shows that combining reskilling with upskilling and use of existing skills for environmental rehabilitation planning, and local investment helped reduce the social cost of closures while preparing workers for new opportunities. Realising the potential of skills transferability requires close coordination between labour ministries, industry, educational institutions and local authorities, as well as accurate labour market diagnostics and early planning. Skills transferability is especially important in developing and emerging economies where fiscal space to finance social protection or long-term unemployment benefits is limited (OECD, 2022).

Mobilising transition finance and blended finance mechanisms to support an orderly and just transition. To succeed, equitable fossil fuel transitions require the reallocation of capital from fossil fuels to more productive sectors in a global decarbonised economy. To do so, transition finance is necessary to enable carbon-intensive sectors and fossil fuel-dependent economies to navigate long-term structural shifts while maintaining economic stability. For many fossil fuel producer economies, elevated borrowing costs and macroeconomic volatility create prohibitive barriers for large-scale clean investments. Blended finance mechanisms—whereby public finance catalyses the deployment of private capital—are crucial to reducing risk and mobilising private investment. Guarantees, first loss capital, political risk insurance and currency hedging tools help derisk renewable energy, energy efficiency, green hydrogen, and industrial decarbonisation projects.

Diversifying economies to reduce fossil fuel dependence over time. Economic diversification beyond fossil fuels is essential. Countries that rely heavily on fossil fuel exports face exceptional risks as global demand declines. Diversification into low-carbon value chains such as hydrogen, critical minerals, renewable energy industries, sustainable agriculture are promising pathways. Natural capital, if properly valued, can unlock new drivers of growth (e.g. eco-tourism and sustainable agriculture) while enhancing climate resilience.

Supporting technology transfer and innovation through strategic partnerships. Technology transfer and innovation are critical enablers of a just and effective transition. Many producer countries face substantial technological gaps that limit their ability to deploy low-carbon solutions at scale. Partnerships between NOCs and more technologically advanced firms—as shown by the experience in **Nigeria** for associated gas utilisation—can rapidly build domestic capacity.

Reforming energy pricing and creating fiscal space to incentivise industrial transformation. Industrial and energy policy can be linked through fiscal frameworks that align energy prices, taxation and subsidies with decarbonisation objectives. Fossil fuel subsidies distort investment incentives and discourage industrial innovation. Their gradual reform, paired with carbon pricing, can shift industrial systems toward energy efficiency, electrification, clean technologies and lower-emission-intensive solutions. Subsidy reform and carbon pricing must be introduced gradually and paired with targeted social

protection to maintain social acceptability and political feasibility. Evidence clearly suggests that broad-based support is a poor substitute for targeted protection for most vulnerable groups (OECD, 2022). Untargeted support raises fiscal costs, weakens price signals, and often disproportionately benefits higher-income households. A better practice is to target assistance to the most vulnerable while preserving incentives to reduce fossil-fuel dependence. In the context of renewed pressure on oil and gas markets, one important lesson from the recent crisis is that emergency support measures, where introduced, must be temporary. The 2022 energy price shock triggered a large wave of emergency interventions, but these have been progressively reduced as prices eased. This shows that governments can reverse extraordinary fossil fuel support when market conditions improve. Emergency support measures should be time-bound, with objective criteria for their phase out as market conditions improve, accompanied by clear communication about their temporary nature (OECD, 2025).

(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?

At COP 30, the OECD Development Centre, through its EFFECT initiative, launched the **COP 30 Plan to Accelerate Solution on "Collaborative Exporter-Importer Governance (CEIG) for Shaped Prosperity Post-Fossil Fuels**. The emerging blueprint on CEIG provides a practical **model of bottom-up cooperative diplomacy** that can help translate climate ambition into concrete, feasible transition pathways. By building on existing trade flows and enabling progress at variable speed and scale consistent with the CBDR-RC principle, CEIG can provide a flexible, voluntary operational vehicle that complements UNFCCC processes and accelerates an equitable transition. By so doing, CEIG can help:

- **Ground transition cooperation in real market dynamics**, as it builds on existing trade flows rather than abstract commitments. Ignoring trade dependency increases transition risk rather than accelerating progress.
- Integrate energy security, fiscal constraints, persistent co-dependence on fossil fuels, rising global energy demand and development priorities **as core components of transition planning**.
- Ensure **predictable, low emission intensity fossil fuel supply where still necessary during the transition** and reduce exposure to market volatility and supply disruptions.
- Offer **politically feasible and economically viable** approaches for exporters concerned about fiscal shocks, social disruption, and continuous energy poverty, and importers facing supply insecurity, price volatility and competitive losses.
- Support the design of **equitable fossil fuel transition pathways**, ensuring affected sectors, regions, communities, and workers are protected. This can give countries the confidence to accelerate their transitions without creating new vulnerabilities or risking affordability or financial/economic stability.
- Support rapid scaling through pilot exporter-importer partnerships, as CEIG is **intentionally designed for experimentation**.
- **Restore trust,** by reflecting different starting points and allowing for flexibility, and anchor cooperation efforts in **reciprocity and mutual benefits**.

CEIG highlights how equitable fossil fuel transitions can be an opportunity to build new comparative advantages and more resilient economies. It proposes exporter-importer cooperative design of mechanisms that:

- **Coordinate supply and demand** to reduce transition risks on both sides.
- **Embed incentives that enable market differentiation for lower methane intensity production** and pathways toward reduced fossil fuel reliance. Mutual commitments for methane abatement, transparency and MRV will help exporters stay competitive as markets tighten, while diversification of sources of supply by emissions performance and transition readiness gives importers options beyond purely price-driven decisions.
- **Improve transparency** on future fossil fuel demand trajectories, reducing information asymmetries across importers and exporters, leading to more predictable demand pathways linked to transition-aligned supply.
- **Enable predictable revenue flows** through price and revenue stability features and planning horizons for exporters.

CEIG provides a framework being piloted through structured cooperation between exporters and importers to advance equitable fossil fuel transitions, particularly for developing and emerging economies. It helps fossil fuel exporters and importers work together to turn their balance of trade into opportunities for cooperation to advance low emissions growth and cleaner value chains that strengthen their economic competitiveness. The gradual build-up of a network of bilateral or plurilateral exporter-importer partnerships can provide a solid basis for replicable solutions for nationally determined pathways for fossil fuel exporters and importers.