POLICY BRIEF

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G20 POLICY BRIEF SERIES

A G20 PATHWAY TOWARDS OIL AND GAS PHASE-OUT

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SUMMARY OF FINDINGS

- G20 countries are the main contributors to global greenhouse gas emissions and have made significant progress in expanding renewable power capacity, yet efforts to phase out oil and gas lag behind.
- Phasing out oil and gas is more complex than coal due to their deep integration in critical sectors like transportation and industry, where alternatives are limited and costly.
- Substantial subsidies, government financing and state-owned enterprises continue to support oil and gas production across G20 countries, creating economic, political and social barriers to the transition.
- There are significant differences among G20 countries in energy resources, economic development, and technology, resulting in varying views and slow progress on clear oil and gas phaseout commitments.
- South Africa's presidency offers a unique opportunity to lead equitable, finance-backed discussions on subsidy reform and phaseout timelines, drawing on its own fossil fuel dependency and transition challenges.

CONTENTS

SUMMARY OF RECOMMENDATIONS

a. Set measurable targets for phasing out oil and gas — develop more evidence-based and synchronised targets balancing climate commitments, economic stability and energy security.
b. Phase out fossil fuel subsidies that burden government budgets and hinder the just energy transition.
c. Promote mass electrification and renewable energy localisation.
d. Develop a concessional financing roadmap to phase out oil and gas while scaling up green investments in the Global South.
e. Discuss a shared definition/taxonomy for a just energy transition in G20.
f. Establish a permanent platform backed by knowledge partners to accelerate the oil and gas phase-out.

1. CONTEXT AND URGENCY

The G20 countries are both the primary contributors to climate change and the most consequential players in combating it. While accounting for approximately 75% of global greenhouse gas emissions,[2] they also hold the greatest potential to lead a coordinated transition towards resilient and sustainable energy systems. In 2023, G20 countries accounted for almost 90% of global renewable power capacity,[3] reflecting significant progress in the clean energy transition. However, it is concerning that a similar momentum is lacking in discussions around the phaseout of fossil fuels — especially oil and gas. Phasing out oil and gas is more challenging than coal due to their deep integration into global economies and critical roles in sectors like transportation and industry, where alternatives are still costly or underdeveloped. Furthermore, substantial subsidies and investments in oil and gas infrastructure create political and economic barriers, further complicating the transition. The challenge is particularly acute for emerging economies, which depend on fossil fuels for industrialisation, energy security, and economic development. Without addressing these structural realities, the phaseout conversation remains disconnected from the broader energy transition agenda.

A globally synchronised strategy that ensures the costs and benefits are shared equitably is critical. If phaseouts occur in an uncoordinated manner, countries that take early action face economic disadvantages, while others continue to benefit from fossil fuel use. A coordinated strategy ensures that the burden of transition is shared equitably, preventing market distortions and maintaining competitiveness. The G20 as a leading global economic forum has the unique ability to establish clear phaseout targets and financing mechanisms, ensuring that countries transition collectively rather than in isolation. While G20 priorities emphasise sustainable growth, energy security, and climate resilience, progress on fossil fuel phaseouts remains stalled. No presidency has been able to secure a clear commitment to phasing out fossil fuels, largely due to differing national interests and priorities. While focus has consistently been placed on energy access, expanding renewables, diversifying the energy mix, and developing green hydrogen, concrete agreement on oil and gas phaseout remains elusive. Despite repeated pledges, G20 nations continue to subsidise oil and gas, totalling US$1.5 trillion in 2023 alone.[4]

Previous presidencies have pushed for renewables, but without binding commitments on phaseouts, fossil fuels still dominate the energy mix. This contradicts climate goals and delays a just transition. G20 discussions on fossil fuel phaseouts remain stagnant. Governments continue to extend financial and policy support for oil and gas exploration, production, and consumption, contradicting commitments to align global finance with low-emission pathways and climate-resilient development.

Additionally, for emerging economies, the financial burden of transition is overwhelming. Meeting the Paris Agreement goals requires climate investment in EMDEs (Emerging Markets and Developing Economies) to increase more than fourfold to $2.4 trillion per year by 2030, including $1.6 trillion for clean energy.[5] Without adequate financing, these economies will struggle to phase out fossil fuels while ensuring equitable growth.

As Figure 1 illustrates, fossil fuels remain the dominant energy source across G20 countries, with significant disparities in clean energy adoption. Some nations have diversified into renewables and nuclear, while others remain heavily dependent on carbon-intensive sources. The uneven pace of transition underscores the urgent need for stronger, binding policies at the G20 level to phase out fossil fuels while ensuring fair burden-sharing and a just transition for all economies.

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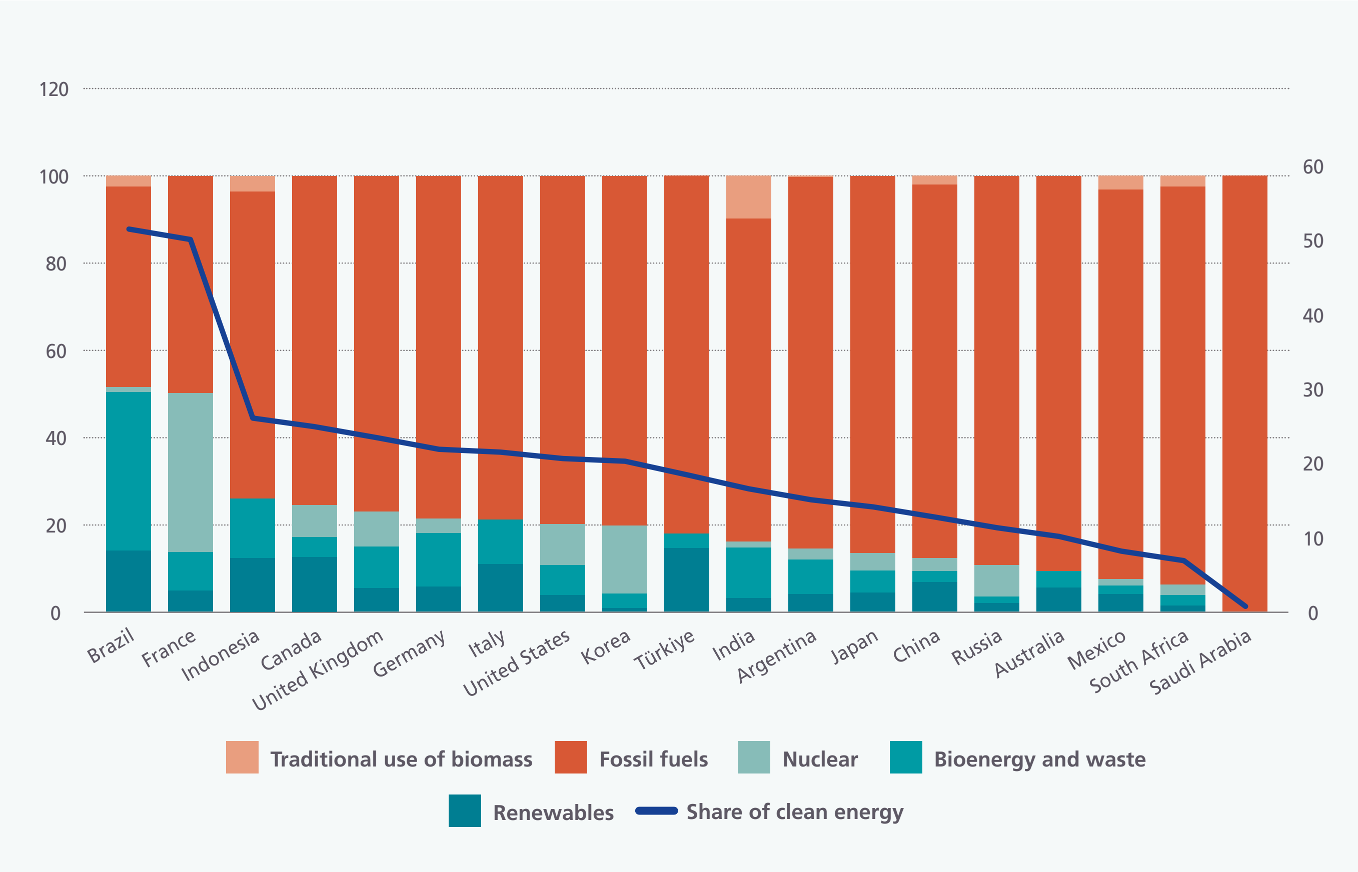
Figure 1: Total Energy Supply for G20 Countries by Energy Source, 2022 (Last updated - 18 July 2024)



Source: IEA. 2024. [Total energy supply for G20 countries by energy source](). IEA, Paris

With fossil fuels accounting for over 75% of CO_2 emissions, the urgency to phase out is not just an environmental necessity but also an economic and geopolitical imperative. A clear, binding roadmap within the G20 is essential to aligning global energy strategies with the Paris Agreement targets. Without it, continued reliance on fossil fuels will deepen the polycrisis, threaten human health, and slow the transition to sustainable energy systems.

2. CURRENT STATE OF PLAY OF OIL AND GAS

G20 governments directly or indirectly support oil and gas production through a range of financial and policy mechanisms. These include direct budget transfers towards subsidies for exploration, R&D, exemptions or lower rate on fuel taxes, and regulating below-market prices for consumers. Additionally, public finance through state-owned development banks, export credit agencies, and concessional loans continue to drive investments in oil and gas. State-owned enterprises (SOEs) further bolsters the sector with many of them receiving government finance to sustain operations.

In response to Covid-19, governments provided temporary relief measures to fossil fuel industries, ranging from grants to relaxed environmental regulations.

While some G20 countries are shifting policies towards clean energy, these entrenched support mechanisms highlight the challenges of phasing out oil and gas and aligning financing with climate goals. G20 Leaders have struggled to move the needle on clear phase-out commitments pertaining to oil and gas. Large variances amongst G20 countries - in terms of energy resource endowment, energy intensity of the GDP, financial linkages, technological capabilities, and economic development has led to differing views regarding the nature and timeline for oil and gas phaseout.

Citing concerns around energy security, industrial growth, and economic development, the EMDEs are inclined towards a phase down rather than a phase out. There are two arguments made for this in the negotiations. Countries like Saudi Arabia and Russia, where oil and gas are key export commodities, are vocal in their opposition for aggressive phaseout timelines. These nations together have called for a more gradual approach that accommodates their economic reliance on oil and gas revenues. A rapid phaseout, they argue, will lead to economic instability, job losses, and social unrest. Russia has objected to stringent regulations stating that such measures infringe upon national sovereignty and economic interests. Other EMDEs including Indonesia, South Africa, Brazil, and India, while sharing the views on the need to address energy security and social justice, also recognise the need to reform subsidies, reduce wasteful consumption, and support a timely transition. They are also vocal in advocating for a just energy transition — calling for financial support and technology transfer to help emerging economies phase out oil and gas without jeopardising economic stability or job security. In contrast, the G7 (except the recent U.S. energy policy direction) countries advocate for more stringent targets to phase out oil and gas particularly with regards to cutting down on subsidies.[6]

Despite differences, the G20 has repeatedly acknowledged the need to phase out oil and gas, with key commitments emerging in the Bali (2022), New Delhi (2023), and Rio Declarations, echoing the Pittsburgh (2009) pledge to eliminate inefficient fossil fuel subsidies. The Bali Leaders' Declaration reaffirmed the commitment to achieving net-zero emissions while recognising the need for a just, affordable, and inclusive energy transition. The New Delhi Declaration emphasised tripling renewable energy capacity by 2030 but lacked binding commitments on fossil fuel phaseouts. The Rio Declaration, while reinforcing previous pledges, failed to outline concrete timelines or financing mechanisms. Without clear deadlines, accountability measures, and financial pathways, especially for emerging economies, these commitments risk remaining aspirational rather than actionable. Strengthening these frameworks within the G20 is crucial to align energy transitions with the 1.5°C climate goal.

3. THE ROLE OF SOUTH AFRICA

The South African presidency is uniquely positioned to lead the discussion on reforming oil and gas subsidies, carbon taxation, and other key actions to chart a phase-out timeline that is sensitive to the needs of Global South countries. The country's own experience with energy security challenges, fossil fuel dependency, and transition financing make it well-positioned to advocate for an equitable, pragmatic, and finance-backed transition. South Africa's energy mix remains coal-dominated, yet the country heavily relies on imported oil (138,000 barrels/day in 2023),[7] exposing it to market volatility and policy shifts like Carbon Border Adjustment Mechanism (CBAM). This dependence strains Eskom, drives up costs, and worsens environmental and health impacts. The Presidential Climate Commission (PCC) urges a renewables-led transition, rejecting new coal and limiting gas to avoid trade risks, investment losses, and health crises. The PCC is designed as a multistakeholder body, thereby facilitating a social dialogue to ensure the transition is an inclusive and fair one. The commission, therefore, calls for a least-cost, renewables-led transition which protects jobs and ensures continued access to energy for all.

As G20 President in 2025, South Africa prioritises mobilising climate finance for a just energy transition, aligning with UN commitments to boost funding for developing nations. This focus spans key G20 groups: the Energy Transition Working Group (ETWG) emphasises energy security, local supply chains, and inclusive transitions; the Environment and Climate Sustainability Working Group (E&CSWG) drives climate resilience; and the Sustainable Finance Working Group (SFWG) seeks to enhance sustainable finance and unlock carbon market potential. Despite these priorities, there's no explicit mention of phasing out oil and gas, nor mention of any timeline setting still reflecting a cautious approach in multilateral settings.

It is essential to facilitate open, substantive discussions on this issue. At the national level, numerous countries have already implemented incentives and mechanisms to support the active phaseout of fossil fuels. Engaging in knowledge exchange, analysing costs and benefits, and sharing best practices are critical to chart an effective roadmap. The table below highlights the incentives provided by various G20 nations to advance a just energy transition.

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Table 1: Incentives given by G20 countries to support fossil fuel phaseout and inclusive transition

INCENTIVE	COUNTRIES	KEY INSTRUMENTS
Carbon Pricing & Taxation	Canada, Japan, United States, Mexico	Carbon taxes, emissions trading systems, and carbon pricing mechanisms.
Renewable Energy Investments	Australia, Brazil, China, Germany, India, Indonesia, Italy, Japan, Mexico, South Africa, South Korea, Turkey, Argentina	Renewable energy auctions, tax credits, feed-in tariffs, and investment funds.
Subsidies for Fossil Fuel Alternatives	Argentina, Saudi Arabia	Government subsidies for renewable energy projects (solar, wind, biofuels, etc.).
Just Transition & Compensation	Argentina, Canada, Germany, South Africa, South Korea	Financial compensation for workers impacted by oil and gas phaseout, investment in affected communities, green job creation programmes.
Energy Efficiency Incentives	Australia, Canada, Germany, Italy, Japan, South Korea, United States	Tax credits, grants, and rebates for energy efficiency upgrades and renewable energy installations.
Phaseout Commitments & National Plans	China, Indonesia, Russia, Saudi Arabia, Türkiye	National energy transition plans, fossil fuel phaseout targets, and long-term renewable energy integration strategies.

Source: Based on author's compilation from research.

4. PROPOSALS AND POLICY RECOMMENDATIONS FOR G20

a. **Measurable targets for phasing out oil and gas:** The production gap report in 2023 emphasised that global oil production in 2030 is projected to be 29% higher and global gas production to be 82% higher than 1.5-degree Celsius aligned pathways.[8] While many G20 countries have committed to net-zero targets, only a few have time-bound strategies detailing the phasing out of oil and gas. This puts emphasis on the need to develop more evidence-based, synchronised, measurable, and enforceable targets that can balance climate commitments, economic stability, and energy security. There should be clear short-term (2030), medium-term (2040), and long-term (2050) goals. Phaseout timelines can be tailored by sector (for example, power, transport, or industry) and country-specific economic conditions with a formal reporting and review system.[9]

b. **Reforming subsidies and carbon pricing:** Fossil fuel subsidies continue to unhelpfully distort energy markets by incentivising ongoing dependence on oil and gas, despite the urgent need for a clean and just energy transition. In 2022, G20 nations provided a record $1.4 trillion in fossil fuel support, with $440 billion directed to new production. While explicit subsidies doubled since 2020, nearly 60% remain implicit, stemming from under-pricing climate and pollution costs.[10] While some market interventions such as subsidies for renewable energy can play a positive role in accelerating decarbonisation, fossil fuel subsidies primarily serve to entrench carbon-intensive energy sources and enable major oil and gas companies to reap excessive profits. These subsidies also place significant burdens on government budgets, limiting resources available for innovation and social programs. To align with climate goals, the G20 must commit to phasing out harmful and inefficient fossil fuel subsidies, redirecting the resulting fiscal savings toward critical areas such as renewable energy research and development, grid modernisation, and robust social protection measures. Enhanced transparency and accountability will be essential to ensure that this transition is both just and equitable, addressing economic and social challenges alongside environmental imperatives. Carbon pricing via taxes is also key to internalising the true costs of oil and gas consumption. In 2023, global carbon pricing revenues reached $104 billion, with over 75 pricing instruments in place.[11] Sectors such as aviation, shipping, and waste are also integrating carbon pricing. However, challenges persist in the form of higher energy costs, inflation risks, regulatory gaps, and industry pushback. The G20 must lead by harmonising policies, strengthening enforcement, and ensuring equitable transition frameworks that protect workers and ordinary households from bearing the cost of the transition, especially as COP's international carbon market standard takes shape.

c. **Promote mass electrification and renewable energy localisation:** Scaling renewable energy is critical for decarbonising electricity grids and reducing dependence on fossil fuels. Yet only 15% of clean energy investments reach the regions that need them most. The Global South requires $1.7 trillion annually[12] for decarbonisation but faces high borrowing costs, limited technology transfer, and restricted concessional financing, hindering progress and reinforcing fossil fuel reliance. Mass green electrification demands targeted financing through green bonds and risk mitigation tools to unlock capital for large-scale projects. Simultaneously, localising renewable energy supply chains can reduce fossil fuel imports and drive industrialisation. The clean energy sector is set to surpass $2 trillion by 2035, rivalling crude oil.[13] G20 leadership must foster long-term partnerships, technology transfer, and capacity-building to help developing nations manufacture solar panels, wind turbines, and battery storage. A just energy transition hinges on making electrification widespread, affordable, and transformative.

d. **Mobilising concessional financing and redirecting investment:** The G20 must lead a concessional financing roadmap to phase out oil and gas while scaling up green investments in the Global South, where high capital costs stall the energy transition. Despite net-zero pledges, multilateral development banks (MDBs) and export credit agencies still channel billions into fossil fuels — $3 billion in 2020 alone, with gas comprising 75% of MDB fossil fuel investments.[14] To close this gap, the G20 must redirect existing financial flows toward clean public transport, renewable grids, and energy storage. MDBs must also end all new fossil fuel financing, aligning with the IEA's net-zero by 2050 pathway. Without decisive action, G20 economies risk locking in fossil dependence, delaying the energy transition, and jeopardising global climate goals.

e. **Discuss a shared definition/taxonomy for a just energy transition:** The G20 must lead in defining a clear, inclusive taxonomy for a just energy transition. Without a shared framework, efforts remain fragmented, risking inequitable outcomes. The Global South's challenges, energy access, financing gaps, and economic dependencies must be prioritised. A unified definition will drive coordinated action, investment, and accountability in the transition.

f. **Reform international financing institutions for energy transitions:** The G20 must reform international financing institutions to incorporate energy transitions frameworks, supported by knowledge partners and other global institutions such as the UN, to drive a coordinated approach to financing, capacity-building, and catalytic investments. This mechanism will ensure long-term commitment, resource mobilisation, and policy alignment, enabling a structured and equitable energy transition.

5. CALL TO ACTION FOR THE G20: A DEFINING MOMENT FOR GLOBAL ENERGY LEADERSHIP

As stewards of 85% of global GDP and two-thirds of the world's population, the G20 must take decisive action to phase out oil and gas equitably. Avoiding this responsibility will only worsen climate risks and fuel economic instability, especially in emerging economies burdened by debt and energy insecurity. The phaseout discussions should not be viewed as an obligation but as an unparalleled opportunity to build resilient, diversified, and job-rich economies powered by renewable energy, energy efficiency, and green industrialisation. To deliver, the G20 must establish a permanent platform backed by knowledge partners and global institutions. Development banks must pivot toward climate-resilient infrastructure, ensuring that emerging economies are not left behind. With COP30 on the horizon, this is the moment for bold financial and policy commitments. Taking decisive action in South Africa, a country at the forefront of the energy transition, will set a powerful precedent. The G20 must seize this opportunity to drive a just, sustainable future—one that defines the global economy for decades to come.

ENDNOTES

1. With special thanks to Gilad Isaacs, Kamal Ramburuth, Mzwanele Ntshwanti, Bukelwa Nzimande and Nerissa Muthayan for their review and feedback.

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