

POLICY BRIEF



From Principles to Action: Strengthening the G20 Approach to Just and Inclusive Energy Transitions

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Accelerating Climate
Action and the Just
Energy Transition



Abstract

The energy sector accounts for nearly three-quarters of global greenhouse gas emissions, making it the primary driver of climate change. Achieving the Paris Agreement's target to limit global temperature rise requires a fundamental transformation in global energy production and consumption patterns, including reducing reliance on fossil fuels and advancing the adoption of renewable energy.

However, transitioning to a clean energy matrix presents significant challenges, including uneven socio-economic impacts, potential harm to biodiversity, disproportionate burdens on vulnerable social groups, and insufficient financial and technological resources – challenges that are particularly pronounced in countries of the Global South. In this context, discussions around the need for green transitions to be just have gained increasing prominence within multilateral forums. A notable milestone was achieved at COP27 in 2022, when the UN Framework Convention on Climate Change (UNFCCC) launched the Just Transition Work Programme (JTWP). However, despite this progress, discussions within the JTWP remain contested, with the concept of just transition lacking the specificity needed to guide actionable climate strategies at national and global levels.

In 2024, under Brazil's presidency, the G20 played an important role in advancing the just transition agenda through the adoption of its Principles for Just and Inclusive Energy Transitions. While these principles represent a positive step forward, the G20 must take further efforts to enhance its ability to effectively foster just transitions.

Building on previous G20 initiatives and relevant developments within other multilateral forums, this policy brief presents recommendations to strengthen and refine the G20's just transition principles, aiming to enhance its outcomes. It offers insights on how they can be strengthened to effectively promote energy transitions that align climate goals with improved socio-economic outcomes, both within the G20 and globally. By clarifying just transition principles and proposing actionable political strategies to embed these principles in national and global policies and frameworks, the brief seeks to further elevate the G20 leadership on just transition, as well as inform other key actors and processes, notably the UNFCCC and the Brazilian COP30 presidency.

Keywords: Just Transition, Climate Action, G20, Taxonomy, COP30

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Diagnosis

South Africa's G20 presidency has placed just energy transitions at the forefront of its agenda. Recognising that the energy sector accounts for nearly three-quarters of global greenhouse gas emissions,¹ South Africa has positioned this sector as a cornerstone of a broader, whole-of-economy transformation. Building on key challenges of transitioning energy systems while promoting sustainable development, eradicating poverty, and reducing inequalities – both within and across countries – this policy brief seeks to explore and respond to these interconnected issues in the context of climate action.

While crucial to tackling the climate crisis, the shift to a renewable energy matrix poses social, economic, and environmental challenges – particularly for Global South countries within and beyond the G20. The complex interplay between climate impacts and transition-related pressures increasingly threatens progress toward the Sustainable Development Goals (SDGs),² currently under review.³

The obstacles span a broad spectrum, including risks to biodiversity, disproportionate burdens on marginalised communities, and limited financial and technological resources.⁴ On the international stage, structural barriers obstruct

¹ IEA. *Greenhouse Gas Emissions from Energy*, 2024, <https://www.iea.org/data-and-statistics/data-product/greenhouse-gas-emissions-from-energy#>

² Sustainable Development Report. *Spillover Index*, 2024, <https://dashboards.sdgindex.org/map/spillovers>

³ While the total number of potential synergies exceeds that of trade-offs, their overall impact depends on the pace and scale of changes, the composition of the mitigation portfolio, and how the transition is managed. For a more detailed analysis on this topic, please see: Intergovernmental Panel on Climate Change (IPCC): Summary for Policymakers. *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, 2018, pp. 3-24, doi:[10.1017/9781009157940.001](https://doi.org/10.1017/9781009157940.001).

⁴ Intergovernmental Panel on Climate Change (IPCC). *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Edited by P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, and J. Malley. Cambridge, UK and New York, NY, USA: Cambridge University Press, 2022.

critical mitigation and adaptation efforts. These barriers include high capital costs,⁵ limited fiscal space,⁶ unsustainable debt levels,⁷ inadequate tax controls, and restrictive conditions for accessing climate finance and green technologies.⁸

In this context, just transition discussions have gained growing prominence in both national debates and multilateral forums. At the national level, just transition considerations reflect the unique circumstances and development priorities of each country. International dimensions are equally significant, especially as the world increasingly recognises the interconnectedness of global challenges. Emerging domestic decarbonisation policies highlight the need to address tensions between national transitions and global goals, while avoiding a “race to the bottom” that could undermine sustainable development.⁹ Multilateral engagement is key to aligning domestic policies with international commitments, enabling countries to design strategies that mitigate socio-economic impacts, share opportunities equitably, and manage cross-border spillover effects.

At COP27 in 2022, the UN Framework Convention on Climate Change (UNFCCC) launched the United Arab Emirates Just Transition Work Programme (JTWP) to advance the objectives of the Paris Agreement while upholding the principles of equity and Common but Differentiated Responsibilities and Respective

⁵ IEA. *Reducing the Cost of Capital*, 2024, <https://www.iea.org/reports/reducing-the-cost-of-capital>

⁶ World Bank. *Scaling Up to Phase Down: Financing Energy Transitions in the Power Sector*, April, 2023, <https://mapa.do.undp.org/files/publications/Scaling%20Up%20to%20Phase%20Down.%20Financing%20Energy%20Transitions%20in%20the%20Power%20Sector.pdf>

⁷ Zucker-Marques, M., Gallagher, K. P., Volz, U., Akhtar, S., Espinosa, M. F., Haas, J., Njoroge, P., & Kenewendo, B. *Defaulting on Development and Climate: Debt Sustainability and the Race for the 2030 Agenda and Paris Agreement*. Boston, London, Berlin: Boston University Global Development Policy Center; Centre for Sustainable Finance, SOAS, University of London; Heinrich Böll Foundation, 2024, https://drqr.org/files/2024/04/DRGR_Report_2024_FIN.pdf

⁸ Institute for Energy Economics and Financial Analysis. *Enhancing access to multilateral climate funds by developing countries: a way forward*, 2024. <https://g20sfwg.org/wp-content/uploads/2024/06/G20-SFWG-P1-IEEFA-Enhancing-Access-of-Developing-Countries-to-Climate-Funds-1.pdf>

⁹ Ngwadla, X., Torres Gunfaus, M., Deprez, A. Mission 1.5: Enhancing international cooperation, making the Paris Climate Agreement's goals possible. IDDRI, *Policy Brief* N°04, 2024.

Capabilities (CBDR-RC).¹⁰ However, JTWP negotiations have revealed a significant divide between developed and developing countries. Whereas developed nations primarily emphasise workforce transition, social rights, and inclusive participation, developing countries – represented by the Group of 77 and China – advocate for a broader approach to climate justice, underscoring the need for adequate financing, technology transfer, and capacity building to ensure that transitions align with sustainable development and poverty eradication goals.¹¹

While discussions within the JTWP remain contentious, in 2024 the G20 agreed on voluntary Principles for Just and Inclusive Energy Transitions. Developed under the Energy Transitions Working Group (ETWG), these principles focus on energy systems transformation rather than broader development frameworks. Unlike COP decisions, which may carry legal implications, the G20 principles are non-binding, potentially limiting their national implementation. Nevertheless, as a collective articulation by the world's largest economies, G20 principles carry substantial political weight. They can generate momentum and foster consensus in other forums, helping to shape a comprehensive just transition framework – one that prioritises economic and social restructuring to address the climate crisis, reduce poverty and inequality, and protect biodiversity.

Building on three consecutive years of G20 leadership by developing countries, South Africa's presidency has prioritised the mobilisation of finance for just energy transitions.¹² In this context, the ETWG aims "to champion energy policies that

¹⁰ UNFCCC. *United Arab Emirates Just Transition Work Programme*, Decision 3/CMA.5, 2023, https://unfccc.int/sites/default/files/resource/cma2023_16a01_adv_.pdf

¹¹ G77 and China. *G77 and China submission on views towards discussion topic of the Second Dialogue under the UAE Just Transition Work Programme*, September 2024, <https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202410020924---G77%20and%20China%20Submission%20on%20Views%20on%20the%202nd%20Dialogue.pdf>; African Group. *Submission on views work to be undertaken and a discussion topic of the Third Dialogue under the UAE Just Transition Work Programme*. February, 2025, https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202502251431---AGN%20submission_UAE%20JTWP_Final%20.pdf

¹² G20 South Africa. *G20 South Africa Presidency: Concept Note and Calendar*, 2025.

address global challenges while prioritising regional and neighbouring African countries to ensure that global energy strategies are inclusive, resilient, and environmentally sustainable”.¹³ Meanwhile, the Environment and Climate Sustainability Working Group (ECSWG) is prioritising finance for broader transitions that extend beyond the energy sector.¹⁴

The key challenge now is how the G20 – through its structures and processes, and despite its limitations – can advance this agenda and translate the ambition of this comprehensive approach into concrete action. The following section outlines a set of recommendations for G20 member states aimed at addressing these challenges.

Recommendations

1. Reinforcing multilateralism: Elevating the G20 Principles for Just and Inclusive Energy Transitions to high-level principles to foster synergies across multilateral forums

Building on decisions from broader multilateral forums,¹⁵ the ETWG should strengthen and elevate the G20 Principles to high-level principles. These would more effectively support countries in developing national strategies, guiding financial mechanisms, and reinforcing international institutions’ roles in enabling just transitions.

¹³ G20 South Africa. *Energy Transitions Working Group Concept Note*, February, 2025, p. 3, https://g20.org/wp-content/uploads/2024/09/Annexure-C-Concept-Note-2025-South-African-ETWG_Final-Version-04.pdf

¹⁴ G20 South Africa. *Environment and Climate Sustainability Working Group Concept Note*, 2025, https://g20.org/wp-content/uploads/2024/12/Issue-Note_Environment-and-Climate-Sustainability.pdf

¹⁵ These forums include the International Labour Organization (ILO) and its Convention No. 169 on Indigenous and Tribal Peoples, along with its standards on social security; the Rio Declaration on Environment and Development, which laid the foundation for the precautionary principle to prevent environmental degradation; and the UNFCCC, particularly its principles of equity and CBDR-RC. The UN Secretary-General’s *Principles to Guide Critical Energy Transition Minerals Towards Equity and Justice*, as well as the ILO’s *Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies for All*, should also be taken into account.

Despite marking progress, the G20 principles have significant gaps. They lack a whole-of-government and whole-of-society approach and provide limited direction on social protection for those most affected by the transition. Key omissions include safeguards for biodiversity and local communities, clear accountability mechanisms, and explicit protections for human and environmental rights – including Indigenous peoples’ customary rights. The principles also require a broader definition of the workforce, recognising informal, unpaid, and care workers, as well as the unemployed. Critically, they devote insufficient attention to means of implementation, which are vital to fair and effective transitions. In light of these gaps, the G20 High-Level Principles for Just Transitions should incorporate the following elements:¹⁶

¹⁶ **1. Whole-of-government and whole-of-society approach:** Adopt a comprehensive and inclusive approach that engages all ministries, levels of government, and sectors of the economy and society in the design of transition plans, policies, strategies and financial instruments to promote just and inclusive energy transitions at the national level. This approach should ensure coherence across national policies while fostering the meaningful participation of all segments of society in just transition processes; **2. Ending energy poverty:** In pursuing strategies to develop low-emission energy systems to achieve global net-zero greenhouse gas emissions and carbon neutrality, it is essential to address all forms of energy poverty. This includes ensuring universal access to affordable, reliable, sustainable and modern energy, including clean cooking, for all; **3. Social dialogue and stakeholder participation:** Foster social dialogue and encourage meaningful, equitable and effective participation by all relevant stakeholders – including affected communities such as Indigenous peoples, local and traditional communities, people of African descent, women, smallholders and family farmers, as well as employers’ organisations and trade unions – in decision-making processes related to energy transitions, and at all stages of the design and implementation of energy transition projects; **4. Social protection:** Strengthen the access to appropriate social protection systems for all as part of just and inclusive energy transitions in order to support workers and communities, with particular consideration to the poor, informal workers and those in vulnerable situations. These mechanisms, designed to reduce vulnerability and mitigate or compensate for socio-economic impacts, should include measures such as medical care to alleviate health-related impacts, retraining and reskilling programmes, unemployment support, and direct cash transfers to provide financial assistance to both formal and informal workers affected by transitions, while also integrating public employment programmes in renewable sectors, clean energy subsidies, and credit programmes to support the establishment and sustainability of small businesses; **5. Policy inclusiveness and intersectionality:** Incorporate intersectional perspectives on gender balance, including women empowerment, age, race, ethnicity and those in any vulnerable situations, into energy planning and policies, ensuring that transition efforts do not inadvertently create additional inequities or exacerbate existing ones. Gender and racial perspectives should be mainstreamed to support comprehensive planning that prevents and mitigates the impact of transition policies on different social groups, while fostering a fair distribution of both costs and benefits; **6. Respect for human, environmental and customary rights:** Respect, promote and consider obligations on human, environmental and customary rights in the planning and implementation of energy transition policies and projects. This includes protecting the broader land and customary rights of Indigenous peoples and local communities; upholding the principle of free, prior, and informed consent; ensuring the rights of children, youth, women, people of African descent, smallholders and family farmers, migrants and refugees and persons with disabilities; and safeguarding labour rights; **7. Affordable and reliable finance mechanisms:** Explore efficient, inclusive and just mechanisms for cost allocation in energy solutions and their impact on the cost of energy, with a focus on timely mobilisation of resources and working towards facilitating low-cost financing that does not exacerbate the debt burdens of developing countries. This approach should prioritise value addition and economic diversification, as well as enable the transfer and co-development of innovative technologies and business models to widely share the benefits and help to mitigate the impacts of energy transitions, especially on the poorest segments of the population; **8. Secure and sustainable solutions:** Promote the adoption of secure and sustainable solutions that adhere to the precautionary principle, while implementing

- Whole-of-government and whole-of-society approach
- Ending energy poverty
- Social dialogue and stakeholder participation
- Social protection
- Policy inclusiveness and intersectionality
- Respect for human, environmental and customary rights
- Affordable and reliable finance mechanisms
- Secure and sustainable solutions
- Sustainable and inclusive economic growth and technological access for all
- Facilitating workforce transformation
- Reduction of inequalities within and between countries and CBDR-RC as cross-cutting principles

The revised principles should inform the UNFCCC process, supporting consensus within the JTWP and fostering greater coherence across multilateral forums.

robust monitoring and evaluation mechanisms to ensure accountability for upholding human rights and environmental integrity within transition projects, taking into account both local and transboundary effects. Prevent, mitigate and compensate for negative socio-economic and environmental impacts of energy-related policies and infrastructure, as well as the extraction, refining and processing of materials and minerals critical to energy transitions, while respecting permanent sovereignty over natural resources and energy infrastructure; **9. Sustainable and inclusive economic growth and technological access for all:** Promote social and economic development through reliable, diversified, sustainable and responsible supply and value chains. This requires strong and inclusive international cooperation to facilitate the development of – and equitable access to – economic and technological solutions that value nature, including nature-based solutions and the bioeconomy; meaningfully integrate Indigenous and traditional knowledge systems; and prioritise local value creation and beneficiation at the source, particularly in developing countries and economies in transition; **10. Facilitating workforce transformation:** Create decent work and quality jobs in accordance with nationally defined development priorities and enable sectoral labour mobility and workforce transformation through reskilling and up-skilling. Adopt measures to ensure that the transition benefits those that have been left behind or are at risk of further marginalisation, prioritising the creation of employment opportunities for unemployed individuals, informal and unpaid workers, smallholders and family farmers, migrants and refugees, with particular attention to women, people of African descent, and other historically marginalised groups. These efforts should align, where relevant, with international guidelines such as the ILO Guidelines on a Just Transition for All; **11. Reduction of inequalities within and between countries and CBDR-RC as cross-cutting principles:** Addressing and reducing inequalities within and between countries is essential to ensuring a fair and just energy transition. The principle of CBDR-RC should be embedded as a cross-cutting element across all policies, programmes, and initiatives, recognising that countries have different historical responsibilities, levels of development, and capacities to promote energy transitions. This includes ensuring adequate means of implementation for just transitions in developing countries, through finance, capacity building and technology development and transfer. It also involves promoting fair burden-sharing and preventing and mitigating the negative externalities of transition policies, including those associated with unilateral trade measures and restrictive intellectual property regimes, particularly in developing nations. For a more detailed description of these principles, please see Plataforma CIPÓ's submission to the JTWP: https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202502171549---Plataforma%20CIP%C3%93_JTWP%20Submission.pdf

2. Strengthening policy signals to ensure continued political support for just transitions

Given its broad influence, the G20 is uniquely positioned to send strong, coordinated signals about the direction and requirements of a global just transition.¹⁷ These signals should align with the proposed High-Level Principles, the latest Intergovernmental Panel on Climate Change scientific assessments, and UNFCCC commitments. Such alignment would build political momentum among key actors to overcome transition barriers, ensuring pathways are grounded on robust climate science and address social, economic, and environmental challenges. These signals should be integrated into the G20 Action Agenda for Affordable and Inclusive Transitions, a key outcome of the ETWG under South Africa's presidency.¹⁸

In parallel, the G20 Leaders' Declaration and Task Forces – particularly Task Force 1 on Inclusive Economic Growth, Industrialisation, Employment, and Reduced Inequality – must emphasise that integrating the just dimension into transitions is essential for achieving climate and development goals, as well as for ensuring viable transitions in the Global South.

Moreover, the Sherpa and Finance tracks should send a strong signal to the UNFCCC and the broader international development and finance ecosystem, reaffirming the Paris Agreement vision for a more equitable and prosperous global economy. In parallel, and in coordination with the G20's Engagement Groups, they should work to mobilise non-state actors around the just transition agenda.

¹⁷ This recommendation is further elaborated in the submission prepared by Southern Transitions; the University of Cape Town, SEI, and IDDRI to the JTWP: https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202502211104---IDDRI_ST_SEI_UCT%20submission%20to%20the%20JTWP.pdf

¹⁸ G20 South Africa. *Energy Transitions Working Group Concept Note*, February, 2025, https://g20.org/wp-content/uploads/2024/09/Annexure-C-Concept-Note-2025-South-African-ETWG_Final-Version-04.pdf

3. Rethinking finance, technology, and capacity building for just transitions: Support the establishment of a matchmaking platform to facilitate implementation

As part of South Africa's efforts to mobilise finance for just transitions, the ETWG and ECSWG are identifying needs and exploring multilateral opportunities to align them with existing and new funding sources. These efforts could inform the creation of a Matchmaking Platform – potentially under the UNFCCC, within the G20, or as a coalition of willing states – to facilitate finance access, capacity building, and technology development, following the principles outlined above and supporting the work of the G20 Sustainable Finance Working Group (SFWG).

Inspired by the Global Alliance Against Poverty and Hunger and learning from previous and complementary G20 initiatives,¹⁹ the platform should be structured around three foundational pillars:²⁰

- **Policy basket:** A non-prescriptive menu of rigorously evaluated policy instruments to promote just transitions, adaptable to specific national or subnational contexts.
- **Knowledge-sharing and capacity-building hub** bringing together national, regional, and international institutions to foster knowledge generation, technical assistance, and voluntary exchange. The hub could support the development of technical capacity to assess policy costs and build the expertise needed for effective implementation.
- **Sources of finance and technology:** attracting supportive entities, including global and regional funds, vertical climate funds, development

¹⁹ One such previous and complementary G20 initiative is the *Reference Framework for Effective Country Platforms*—a set of voluntary, non-binding principles launched by the Finance Track during Saudi Arabia's G20 Presidency: <https://www.mof.gov.cn/en/Cooperation/mulid/202011/P020201104581749367491.pdf>

²⁰ For further details on this recommendation, please see Plataforma CIPÓ's submission to the JTWP: https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202502171549---Plataforma%20CIP%C3%93_JTWP%20Submission.pdf

banks, and public and private donors, committed to providing financial and technological support to state and non-state actors in fulfilling national commitments to implement just transition programmes within the platform's policy basket.

By adopting these recommendations, the G20 could establish a framework – grounded in guiding principles, high-level signals, and strong implementation mechanisms – to coordinate international efforts for just and inclusive energy transitions. It can advance progress through high-level commitments and foster a shared technical understanding to guide cooperation across the Sherpa and Finance tracks, cross-cutting Task Forces, and Engagement Groups. The G20 is thus well positioned to lead a holistic just transition strategy prioritising equitable economic, social, and environmental transformation – essential for achieving global climate and sustainable development goals while addressing systemic inequalities within and between countries.

T20 South Africa convenors



The Institute for Global Dialogue (IGD)



The South African Institute of International Affairs (SAIIA)



The Institute for Pan-African Thought and Conversation (IPATC)

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