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# Promoting Inclusive Just Energy Transitions: Pathways to Equity and Sustainability

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Accelerating Climate  
Action and the Just  
Energy Transition



# Abstract

The transition to sustainable energy systems must be just and inclusive, ensuring that vulnerable populations, including women, youth, Indigenous communities, and workers in carbon-intensive industries, are not left behind. This policy brief examines the challenges and opportunities of advancing an inclusive, just energy transition in developing economies. It highlights how policies can be structured to integrate social equity with economic and environmental sustainability, aligning with the Group of Twenty (G20) priorities on climate action and sustainable development.

Drawing on case studies from South Africa, Indonesia, and Colombia, this brief explores best practices and innovative policy mechanisms. In South Africa, the Just Energy Transition Partnership (JETP) demonstrates how multilateral financing can support coal-dependent communities through green job creation. Indonesia's transition strategies highlight the role of social protection policies in mitigating employment losses in fossil fuel industries. Colombia's participatory governance model in renewable energy projects showcases the importance of community-driven decision-making to enhance inclusivity and local benefits.

The relevance of these case studies to the G20 agenda lies in their alignment with global climate agreements, including the Paris Agreement and Sustainable Development Goals (SDGs), particularly SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action). Key contributions include identifying best practices for integrating social protection mechanisms into energy policies, fostering public-private partnerships for inclusive energy transitions, and leveraging innovative technologies to enhance access to renewable energy.

Based on the aforementioned insights, we propose policy recommendations focusing on (1) targeted financial mechanisms to support marginalised groups, (2) capacity-building initiatives for reskilling workers in the fossil fuel sector, and (3) inclusive governance structures that ensure meaningful civic participation. These recommendations strengthen the G20's role in promoting equitable and sustainable energy transitions across the Global South. The recommendations aim to inform G20 policy frameworks by presenting a holistic approach to energy transitions that balances environmental imperatives with socio-economic equity.

**Keywords:** Energy Policies, G20, Inclusivity, Innovative Policies, South Africa

## Diagnosis

The need for a global energy transition is undeniable in the face of ever-increasing climate change impacts. However, this transition brings significant socio-economic disruptions, especially for vulnerable groups and marginalised communities dependent on carbon-intensive industries. The 'just energy transition' concept has emerged as a framework that seeks to ensure that this shift to clean energy systems does not deepen existing inequalities (Kirton, 2020; Yang, et al., 2024). Instead, it ensures that the shift catalyses more equitable and inclusive development (Yang, et al., 2024).

The G20, which represents the world's major economies that account for approximately 80% of global greenhouse gas emissions,<sup>1</sup> plays a critical role in steering the global energy transition (Downie, 2015, 2022; Röhrkasten, Thielges & Quitzow, 2016). The G20 member states are home to diverse populations with varying levels of vulnerability to climate change impacts and the potential adverse effects of rapid energy transitions (Codal, Ari & Codal, 2021; Shang et al., 2024). This creates a complex landscape where environmental needs must be balanced with socio-economic considerations.

Recent events across the southern hemisphere highlight the challenges of implementing just energy transitions. For instance, in coal-dependent regions of South Africa, the phase-out of coal mines and power plants threatens livelihoods in communities with limited economic alternatives (Mirzania, Gordon & Balta-Ozkan, 2023; Nel, Marais & Mqotyana, 2023). The South African government's partnership with developed nations through the Just Energy Transition Partnership (JETP)<sup>2</sup> has attempted to address these challenges by mobilising \$8.5 billion in concessional financing for renewable energy projects and community support

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<sup>1</sup> G20 Research Group. "Ministerial Declaration." *Environment and Climate Sustainability Working Group (ECSWG)*. Rio de Janeiro, October 3, 2024.

<sup>2</sup> Institute for Human Rights and Business. "What are JETPs? (Just Energy Transition Partnerships)." Available at [IHRB - What are JETPs? \(Just Energy Transition Partnerships\)](#). March 27, 2025.

initiatives and projects (Baker & Burton, 2024). However, concerns persist about these measures' adequacy and ability to reach the most vulnerable populations.

Following the UN University High-level Symposium in March 2025 on exploring South Africa's G20 presidency, South African Deputy President Paul Mashatile emphasised the challenges the G20 presidency may face as a result of the current 'tectonic shifts in global affairs'.<sup>3</sup> The deputy president's statement highlights the urgent need for equitable and accessible financing mechanisms to support the just energy transition, particularly for developing countries and marginalised communities, ensuring that no one is left behind in the shift toward a greener future.

Similarly, Indonesia's energy transition plans have faced resistance from communities dependent on coal mining and palm oil production (Sekaringtias, Verrier & Cronin, 2023). The government's efforts to develop sustainable renewable energy sources have been hindered by limited funding approaches and regulatory frameworks that fail to adequately address the needs of affected communities.<sup>4</sup> These challenges highlight the need for critical policy approaches integrating social protection measures, community engagement, and economic diversification strategies.

The case of Colombia presents key insights into the practical participatory governance approach toward inclusivity in the energy transition process. This success came with the need for an ambitious renewable energy expansion programme that emphasised community engagement in project planning and implementation through the Columbia Peace Agreement in 2016.<sup>5</sup> The approach has led to a greater local acceptance of renewable energy projects, creating

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<sup>3</sup> United Nations University. UNU Hosts High-level Symposium Exploring South Africa's G20 Presidency. Available at [UNU Hosts High-level Symposium Exploring South Africa's G20 Presidency | United Nations University](#). March 27, 2025. Also see Figures 1 and 2 in the Appendices.

<sup>4</sup> Institute for Economic and Social Research, Faculty of Economics, Universitas Indonesia (LPEM FEB UI). Towards inclusive energy transition in Indonesia. Available at [KONEKSI POLICY BRIEF](#). March 21, 2025.

<sup>5</sup> United Nations Development Programme (UNDP). Colombia's just energy transition: A people-centred cost-benefit analysis. Available at [11. Colombia's](#). March 21, 2025.

opportunities for community engagement and for marginalised communities to benefit from the energy transition process.<sup>6,7</sup>

While the countries above offer crucial insights into their different energy transition strategies, it is important to acknowledge that they all represent works in progress rather than a complete outline or blueprint for success. Each case above presents both achievements and ongoing challenges that inform our understanding of inclusive transition processes. South Africa's JETP has mobilised significant funding. However, the country faces implementation challenges. Indonesia's renewable energy plan faces resistance from fossil fuel-dependent communities, and Colombia's participatory approach, while promising, is still evolving.

Several cross-cutting themes emerge from the case studies that are relevant to the G20 agenda. These are: (i) funding mechanisms, (ii) employment and skills development, (iii) governance and participation, (iv) technology access and innovation, and (v) policy coherence and integration.

We mapped out these themes as they align with the broader G20 priorities on climate action, sustainable development, and inclusive growth. Furthermore, they align with the principles of the Paris Agreement and the SDGs, particularly SDG 7, SDG 8, and SDG 13. Addressing the issues involves innovative policy approaches beyond conventional energy sector reforms. This draws on a significant paradigm shift towards energy systems prioritising equity, inclusivity, and sustainability (Ciplet, 2021; McCauley, et al., 2019). The G20 is fully positioned with its economic influence and political weight to drive this shift. However, it will only be possible by setting targets for just energy transitions, mobilising financial resources, and pushing for international cooperation. These strategies are, therefore, significant and have become timely. Below are recommended steps

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<sup>6</sup> Results for Engagement. "Making Colombia's energy transition a just one for all: 4 lessons from the governance action hub." Available at: [Just Energy Transition: 4 lessons from Colombia | Results for Development](#), March 21, 2025.

<sup>7</sup> Results for Engagement. "Harnessing local systems: A participatory approach to just energy transition in Colombia." Available at [Colombia's Just Energy Transition: a participatory approach | Results for Development](#), March 21, 2025.

that the G20 countries can apply to promote inclusive and just energy transitions within their borders and through concrete partnerships.

## **Recommendations**

### **1. Create a G20 Just Energy Transition Fund**

Investing in just energy transition and renewable energy infrastructure ensures investments are equitably distributed. This approach provides the G20 with a significant framework for creating a financing mechanism that supports inclusive energy transitions (Yang et al., 2024), particularly for countries in the Global South. It will also ensure that transition costs do not disproportionately burden marginalised communities and vulnerable groups. Building upon initiatives such as the South African JETP, this fund must expand its scope to include unified finance strategies that combine public and private capital to reduce the risks associated with renewable energy projects in marginalised communities. To ensure a smooth and equitable transition, funds must be managed and mobilised by the G20 Sustainable Finance Working Group. Also, G20 members must contribute proportionately to their historical emissions and economic capacity.

### **2. Develop social protection frameworks**

G20 countries must focus on developing and implementing inclusive social protection frameworks to help reduce or eliminate the negative impacts of energy transitions on marginalised communities and vulnerable groups. These frameworks, which should be developed by the G20 Development Working Group and Employment Working Group, should include unemployment insurance schemes specifically designed for workers in fossil fuel industries while offering extended coverage periods for sectoral transition challenges. More so, providing a safety net in the form of a universal basic income for those affected during the

energy transition process is advised. The G20 presidency must map out a guideline on energy subsidy reforms that move financial backing from fossil fuels to renewable energy while ensuring low-income households maintain access to affordable energy services.

### **3. Create G20 centres for skills and capacity development for a just energy transition**

To fight the challenges of employment shifts in the energy sector, the G20 must commit to creating centres dedicated to skills, capacity development, and knowledge transfer. Both the G20 Education Working Group (EdWG) and the Digital Economy Working Group (DEWG) should establish standardised training programmes for renewable energy technologies, energy efficiency, and related fields. The EdWG and DEWG must prioritise practical skills that are relevant to local needs and contexts is crucial. Also, training-for-trainer initiatives should be provided to build capacity within educational institutions in developing regions. Exchange programmes and fellowships between G20 countries should be provided for knowledge transfer, especially for marginalised and vulnerable groups with specific targets, including women. The G20 presidency must create a roadmap for knowledge transfer and build capacity for increased participation and inclusivity as energy transition occurs.

### **4. Promote inclusive governance mechanisms**

The G20 Anti-Corruption Working Group and the G20 Engagement Groups, particularly Civil 20 (C20) and Think 20 (T20), could collaborate to develop inclusive governance standards and structures for energy transitions at both national and local levels. These should include mandating meaningful consultations with affected communities, civil society organisations, and labour unions in shaping and executing energy policies. The G20 member countries can share best practices by establishing multi-stakeholder advisory groups that include voices from marginalised communities to provide insights on transition

strategies. Community-owned renewable energy projects and initiatives can also be supported through regulatory frameworks that encourage collective ownership and investment models.

## **5. Enhance data collection and monitoring**

To track progress and ensure accountability in just energy transitions, the G20 must develop clear indicators and metrics to measure the inclusivity and equity of energy transition, including gender-disaggregated data. A public digital platform for monitoring commitments to just energy transitions is necessary to promote transparency and accountability. Regular impact assessments of energy transition policies on marginalised and vulnerable groups will help inform policy updates when needed. Ultimately, the G20 must mandate the Energy Transitions Working Group, the DEWG, and agencies such as the International Energy Agency<sup>8</sup> and the International Renewable Energy Agency<sup>9</sup> with the task of developing these indicators and metrics, including monitoring frameworks, as often as possible.

## **Scenario of outcomes**

The G20 will demonstrate leadership in promoting inclusive, just energy transitions that tackle climate change and promote social fairness and equity if appropriate steps are taken to implement the key points suggested above. The recommended steps can be further revised by incorporating new monitoring indicators and metrics. Continued cooperation with member countries through specific dialogues will help build and enhance collaborative environments where energy transition plans can be executed peacefully. More so, the recommended steps would not only accelerate the global shift toward renewable energy but also ensure this shift contributes to a more equitable and sustainable

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<sup>8</sup> The IEA dedicated website is: [IEA – International Energy Agency](https://www.iea.org/)

<sup>9</sup> The IRENA dedicated website is: [IRENA – International Renewable Energy Agency](https://www.irena.org/)



development pathway for communities, especially those historically marginalised by changes in the energy environment.

International cooperation is key to sharing best practices, technologies, and financial resources that will enable developing countries to shift away from fossil fuel dependency. Setting up a system for ongoing monitoring and evaluation will allow for transparency and show how transition policies affect different groups. Incorporating local knowledge systems and Indigenous approaches to sustainability can further enhance the resilience and cultural appropriateness of new energy systems. Finally, as climate change impacts intensify, these transition efforts must align with broader adaptation strategies to help communities benefit from cleaner energy and equip them for the environmental changes already underway.

## References

Baker, Lucy, and Jesse Burton. "From the minerals-energy complex to a just transition." *The Evolving Structure of South Africa's Economy: Faultlines and Futures* (2024): 270-296.

Ciplet, David. "From energy privilege to energy justice: A framework for embedded sustainable development." *Energy Research & Social Science* 75 (2021): 101996.

Codal, Keziban Seckin, Izzet Ari, and Ahmet Codal. "Multidimensional perspective for performance assessment on climate change actions of G20 countries." *Environmental Development* 39 (2021): 100639.

Downie, Christian. "Global energy governance in the G-20: States, coalitions, and crises." *Global Governance* (2015): 475-492.

Downie, Christian. "Steering global energy governance: Who governs and what do they do?." *Regulation & Governance* 16, no. 2 (2022): 487-499.

Kirton, J. "Globalization's implications for G20 governance." *International Organisations Research Journal* 15, no. 2 (2020): 24-54.

McCauley, Darren, Vasna Ramasar, Raphael J. Heffron, Benjamin K. Sovacool, Desta Mebratu, and Luis Mundaca. "Energy justice in the transition to low carbon energy systems: Exploring key themes in interdisciplinary research." *Applied energy* 233 (2019): 916-921.

Mirzania, Pegah, Joel A. Gordon, Nazmiye Baltas-Ozkan, Ramazan Caner Sayan, and Lochner Marais. "Barriers to powering past coal: Implications for a just energy transition in South Africa." *Energy Research & Social Science* 101 (2023): 103122.

Nel, Etienne, Lochner Marais, and Zolile Mqotyana. "The regional implications of just transition in the world's most coal-dependent economy: The case of Mpumalanga, South Africa." *Frontiers in Sustainable Cities* 4 (2023): 1059312.

Röhrkasten, Sybille, Sonja Thielges, and Rainer Quitzow. "Sustainable energy in the G20: Prospects for a global energy transition." (2016).

Sekaringtias, Annisa, Brunilde Verrier, and Jennifer Cronin. "Untangling the socio-political knots: A systems view on Indonesia's inclusive energy transitions." *Energy Research & Social Science* 95 (2023): 102911.

Shang, Yuping, Shenghu Sang, Aviral Kumar Tiwari, Salahuddin Khan, and Xin Zhao. "Impacts of renewable energy on climate risk: A global perspective for energy transition in a climate adaptation framework." *Applied Energy* 362 (2024): 122994.

Yang, Yu, Siyou Xia, Ping Huang, and Junxi Qian. "Energy transition: Connotations, mechanisms and effects." *Energy Strategy Reviews* 52 (2024): 10

## Appendices



Figure 1: Paul Mashatile, Deputy President of the Republic of South Africa, speaks at the UN University High-level Symposium exploring South Africa's G20 presidency on 18 March 2025. Photo Credit: United Nations University / C. Christophersen



Figure 2: Panel session for 'South Africa's G20 Presidency: Solidarity, Equality, Sustainability – a Conversation with Japan' at the UN University on 18 March 2025. Photo: UNU / C. Christophers

## T20 South Africa convenors

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The Institute for Global Dialogue (IGD)



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

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