



International Renewable Energy Agency

12 December 2024

Fifteenth session of the Assembly

Abu Dhabi, 12-13 January 2025

Background Note

High-level Panel on Energy Transition Pathways in Emerging Economies

1. Within the strategic framework of the World Energy Transitions Outlook (WETO), IRENA collaborates closely with various Members to provide inputs for planning and implementing energy transition pathways and climate commitments aligned with the 1.5°C temperature goal of the Paris Agreement, while supporting Sustainable Development Goals.
2. The latest WETO 2024 indicates that global investments in energy transition technologies exceeded USD 2 trillion in 2023, setting a record. Industrialised economies¹ accounted for 40% of these energy transition investments, totaling USD 800 billion. Meanwhile, emerging markets received 45% of global investments of around USD 900 billion, with the majority directed toward China, India, and Brazil. Due to projected levels of sustained energy demand increases in emerging economies during the period to 2050 and particularly in this decade to 2030, the role of emerging economies is pivotal for the success of the global energy transition to stay on track with net zero ambitions.
3. Based on the results of the First Global Stocktake and the UAE Consensus at COP28, there is a need to accelerate deeper emission reductions in this critical decade. According to the UAE Consensus, renewable energy capacity must triple, and the rate of annual energy efficiency increases must double by 2030. This translates into cumulative investments of USD 31.5 trillion to renewable power, electrical networks, flexibility measures, energy efficiency, and conservation by 2030. The role of emerging economies will be key in achieving the levels of investments in energy transition infrastructure.
4. While most emerging economies have committed to achieving net zero greenhouse gas emissions, there is a critical need to scale up energy transition investments in the next six years to 2030. Scaling up investment from both public and private sources in energy transition is critical, supported by international collaboration and enabling policies. Deployment of public funds can be increased and better targeted to derisk and leverage private capital and to offer low-cost long-term capital for energy transition investments.
5. Maximising multi-stakeholder consultation and collaboration, both nationally and internationally, will also be crucial. Peer-to-peer engagement can foster international co-operation between

¹ Comprising 38 countries with 14% of the global population and 40% of global GDP.

emerging economies, particularly South-South co-operation, and drive ambition in Nationally Determined Contributions (NDCs) that will be submitted prior to COP30.

Objectives

6. The High-Level Panel will serve as a platform for discussing how to accelerate the energy transition in emerging economies in this critical decade to 2030. High-level representatives from emerging economies will discuss their net-zero pathways, energy transition strategies and plans for implementing the UAE Consensus, and advancing the dialogue on implementing the Global Stocktake outcomes. The emphasis will be on immediate acceleration of energy transition and how public finances can be leveraged to attract and derisk private capital. Countries actively engaged in South-South cooperation can also present lessons from international co-operation with other emerging economies. A key focus will be on how emerging economies can drive the global commitment for tripling renewables by 2030 to foster the global energy transition.
7. The session also aims to identify immediate opportunities for energy sector transformation in emerging economies and explore the necessary technological, financial, and policy decisions that countries may consider. Deliberations would also provide guidance for IRENA's strategic collaboration with emerging economies in view of achieving the global goal of tripling renewables by 2030.

Guiding Questions

- What are the critical elements of your country's energy transition strategy to achieve emissions peaking and net zero commitments? What are the key lessons so far?
- How to accelerate the energy transition in your national context? What are the challenges?
- How are you addressing the need for long-term low-cost capital for your energy transition? How successful have you been in attracting private investments at the required scale?
- What do you see as the role of fora such as G20, BRICS etc. to drive international co-operation in energy transition and climate action?
- What are your plans to demonstrate enhanced ambition in your submitted/planned NDC 3.0? Are there any challenges envisaged in implementation?
- Do you expect geopolitical developments to affect the pace and nature of the energy transition and achieving the temperature goals of the Paris Agreement?
- Do you have South-South cooperation programmes with other emerging economies in the energy transition? If so, what are the key lessons?

Associated Publications

[World Energy Transitions Outlook \(2024\)](#)

[Delivering on the UAE Consensus: Tracking progress toward tripling renewable energy capacity and doubling energy efficiency by 2030 \(2024\)](#)

[Development banks and energy planning: Attracting private investment for the energy transition; the Brazilian case, IRENA, BNDES \(2024\)](#)