

27 September 2022

Twenty-fourth meeting of the Council Abu Dhabi, 27-28 October 2022

Background Note

Enabling Frameworks for the Energy Transition in Higher-Risk Environments

Background

- 1. The need for an energy transition based on renewable energy has never been more pressing. Climate change has brought some of the most severe heat waves, droughts, and floods, impacting food security in many parts of the developing world. Fossil fuels have hit recordhigh prices globally and geopolitical developments have raised serious energy security concerns in many regions. Meanwhile, billions of people still lack access to modern energy services.
- 2. According to IRENA's 1.5°C Scenario, a tripling of annual renewable capacity additions from the current 260 GW (in 2021) to average yearly additions of 860 GW in the next nine years is needed in the power sector. However, the investments urgently required to achieve such a scale up face obstacles due to both existing and new risks, real and perceived. These vary depending on the context. For example, in many emerging markets particularly in Sub-Saharan Africa, risks related to policy and regulations, contract enforcement, currency exchange and grid and transmission are hindering the deployment of renewable power.
- 3. In other parts of the world where the renewable energy sector is more developed, supply chain disruptions and increases in costs including financing, grid integration, materials and equipment are presenting new challenges. The focus of renewable energy policy on driving costs down towards parity with fossil fuels and beyond, has led to the concentration of supply chains in a small number of countries/regions. Trade issues and COVID-related measures have disrupted the supply of key components and equipment from those countries/regions to the rest of the world, demonstrating the vulnerability of this model and the value of localisation.
- 4. These developments call for immediate policy interventions and innovative policy design. Policies need to be designed in a way to meet the objectives of climate, energy security and access, as well as the development of local renewable energy industries to ensure energy security and other socio-economic benefits. Tailoring international support to address investment flows in higher-risk environments is crucial to ensure an inclusive energy transition and avoid the concentration of financing in specific regions/countries.

Objective of the session

5. The objective of the session is to discuss the most challenging risks to renewable energy investments in the power sector in different contexts and to have an interactive exchange on how these risks can be addressed. The session will open with a presentation on IRENA's latest analysis of policy design to address these risks, focusing on renewable energy auctions, and will gather feedback from Members on how this analysis can support their objectives.

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Guiding questions

- What are the most important barriers to renewable energy investments in different contexts?
- In the power sector, projects are facing risks related to permitting, supply chains (disruptions and increased costs of materials, components and financing), and currency exchange, among others. What is the best way to allocate these risks among the different players including governments, developers, consumers and others?
- When it comes to auctions, what are the most relevant design elements for the allocation of risks among different stakeholders and what are the trade-offs to consider?
- How can IRENA continue to support Members in the design of policies to support renewable energy deployment at the scale needed to achieve policy objectives?

Associated publications

Renewable Energy Market Analysis: Africa and its Regions

Unlocking Renewable Energy Investment: The role of risk mitigation and structured finance

IRENA's series on Renewable Energy Auction Design

IRENA's series on Leveraging Local Capacity