Background Note

Global Landscape of Renewable Energy Finance

Background

1. Global investment in energy transition-related technologies, including energy efficiency, reached a record high of USD 1.3 trillion in 2022. However, annual investments need to at least quadruple to remain on track to achieve the 1.5°C Scenario in IRENA’s World Energy Transitions Outlook 2023 Preview. Investment in renewable energy was also unprecedented – at USD 0.5 trillion – but represented less than one third of the average investment needed each year. Investments are also not flowing at the pace or scale needed to accelerate progress towards universal energy access. Investments in off-grid renewable energy solutions in 2021 – at USD 0.5 billion – fell far short of the USD 2.3 billion needed annually in off-grid solar products alone (not including mini-grids).

2. The third edition of the biannual Global Landscape of Renewable Energy Finance report by IRENA and the Climate Policy Initiative (CPI) published in February 2023 analyses investment trends by technology, sector, region, source of finance and financial instrument in the period 2013-2020 and provides preliminary data for 2021-2022. It also identifies financing gaps to support informed policy making for the deployment of renewables at the scale needed to accelerate the energy transition.

3. The report finds that investments have become further concentrated in specific technologies and uses. Between 2013 and 2020, power generation assets attracted, on average, 90% of renewable investments each year. In 2021 and 2022, their share went up to 97%. Investments in heating and cooling and transport which are essential for achieving the energy transition are lagging, and the gap has increased over time. In 2020, renewable energy for end-use applications received less than 5% of the total investment (USD 17 billion), down from 8.5% in 2013 (USD 20 billion). Preliminary data shows that their share has further decreased to 3% in 2022 (USD 13 billion).

4. More importantly, although global investments are growing, they are increasingly focused in a few countries. Around 85% of global renewable energy investments benefited less than half of the world’s population in 2022. Moreover, the disparity in renewable energy financing received by developed versus developing countries continues to increase and has more than doubled over the past six years. To support just and inclusive energy transitions, investments need to be more equitably distributed.

5. The report underscores the need for stronger international cooperation to direct public funds to regions and countries that have considerable untapped potential but find it difficult to attract investment. It highlights that funding must be focused on supporting energy transition infrastructure development, as well as enabling policy frameworks to drive investment and address persistent socio-economic gaps.
6. To achieve that, the availability of capital for public investments in renewable energy will need to be increased and lending to developing nations transformed. For example, funds with more grants and concessional loans are needed. Innovative partnerships and instruments, including the Just Energy Transitions Partnership packages being developed for a number of countries, can contribute to these efforts. Meanwhile, public finance and policy should continue to be used to crowd in private capital and policies and instruments beyond those used to mitigate risks. Governments and development partners must play a more active role in ensuring a more equitable flow of finance that recognises the different endowments and starting conditions of countries, and transform the international financial architecture to better support developing countries in their energy transition and development efforts.

Objective of the session

The objective of the session is to discuss and collect views of IRENA Members regarding experiences - including difficulties - in attracting private capital for renewables, and the role that public funds can play to help countries close their investment gaps, highlighting the need for international cooperation. Members are invited to share country-specific experiences and offer guidance on how IRENA can support them in mobilising the investments needed for renewable energy projects that are essential for achieving Sustainable Development Goals.

Guiding questions

- What are the biggest challenges to attracting finance for renewable energy deployment in developing countries and how is the current macroeconomic environment impacting flows of investment towards renewables?

- What policies, regulations, and financial frameworks are needed in order to expand and speed up the deployment of renewable energy globally for the world to meet climate and development goals? What role does public finance play in ensuring just and inclusive energy transitions?

- How can collaboration between the public and private sector and cooperation between Global North and Global South countries be strengthened to scale up the deployment of renewable energy and what is your perspective on just energy transition partnerships?

- How can IRENA build on its analytical work to support countries in mobilising the financing needed to deploy renewable energy projects and simultaneously contribute to achieving Sustainable Development Goals?

Associated Publications

- Global landscape of renewable energy finance 2023 (2023)

- World Energy Transitions Outlook 2023: 1.5°C Pathway; Preview (2023)