Briefing: Finance and investment to triple renewables by 2030

November 2024

Summary:

At COP28, global leaders committed to tripling renewable energy capacity to 11,000 GW by 2030 and transition away from fossil fuels, marking a historic shift in the pace of global climate action to keep the 1.5°C goal within reach. In addition, the COP28 Renewables and Energy Efficiency Plede„ endorsed by over 130 countries, emphasizes the need for scaling up financial support for renewable energy in emerging markets and developing economies (EMDEs), including investments from diverse sources including private sector, multilateral banks, and philanthropy. Additionally, the pledge highlights the importance of accessible financing mechanisms to lower cost of capital in these regions.

This GRA briefing identifies[1] key action areas to overcome barriers to renewable energy financing in EMDEs, helping create an environment conducive to achieving the 3XRenewables target by 2030. **GRA urges public and private financiers, governments, and the renewable energy industry to integrate 2030 Tripling Renewables and Doubling Energy Efficiency goals into their investment strategies and government policies. This includes ensuring that NDCs due in 2025 are investible, with a focus on mobilizing financial flows toward projects that meet these pledges,** with an emphasis on directing financial flows toward projects in EMDEs aligned with these goals

We encourage a multi-stakeholder assessment of these challenges and opportunities at COP29 in Baku, helping to shape financing discussions towards COP30.

[1] GRA conducted research and stakeholder consultations, including with its Financing Advisory Group.

Context

Global investment in clean energy transition technologies reached a record high of USD 1.3 trillion in 2022, with renewable energy investment close to USD 0.5 trillion[2]. However, 85% of this clean energy investment in 2023 was concentrated in China, the US, and Europe, with regions like Sub-Saharan Africa attracting less than 1% of the global total[3]. This uneven distribution highlights a significant fault line in meeting the 3XRenewables by 2030 and Paris Agreement goals.

A cumulative investment of USD 10.5 trillion is required to triple renewable energy power generation by 2030 and reach the global tripling target[4]. This necessitates increasing annual renewable energy investments to average USD 1.5 trillion each and every year to 2030, almost triple the USD 486 billion investment that took place in 2022[5]. Additionally, investments in modernising power grids and enhancing operational flexibility must increase from USD 274 billion in 2022 to average USD 605 billion each and every year to 2030[6].

This financing gap poses two key challenges: rapidly increasing investment flows needed to meet the global targets, and ensuring these investments reach emerging markets and developing economies (EMDEs). Despite recent momentum in clean energy investments, growth is largely driven by solar PV and storage, with other technologies, including wind, pumped hydro storage, green hydrogen, specific types of long duration energy storage and geothermal, lagging behind. While renewables' investment is increasing and power technologies have reached important cost-efficiencies, more investment is needed, hindered by financial, regulatory, market, infrastructure, permitting and technical barriers.

Moreover, with close to 700 million people still living without access to electricity, there is also huge potential for off-grid solar PV, storage and renewable mini-grids to deliver energy access to where it is most needed. Concessional finance for large-scale projects, and micro-finance solutions on well-suited to micro-renewables for individual households and productive uses needs to be prioritised as part of our global effort to deliver universal energy access, and provide back up to the grid in areas where there are frequent blackouts.

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[2] (IRENA, COP29, GRA, 2024, Delivering on the UAE Consensus: Tracking progress toward tripling renewable energy capacity and doubling energy efficiency by 2030
https://www.irena.org/Publications/2024/Oct/UAE-Consensus-2030-tripling-renewables-doubling-efficiency

[3] ibid

[4] ibid

[5] ibid

[6] ibid

The renewables industry is expected to get the needed projects built. Yet the required investment hasn't materialised, highlighting the urgency for effective regulatory and policy action. Perceived country & project risks, permitting and grid connection delays, supply chain constraints, a lack of microfinance for small scale renewables in EMDEs, inadequate auction frameworks, lack of access to markets and ancillary service payments and "race to the bottom" pricing have all contributed to lower returns and constrained financial flows.

To address these challenges, GRA identified[7] key action areas, focusing on the role of public and private financiers, the renewable energy industry, and governments in overcoming barriers to renewable energy financing, especially in EMDEs. The goal is to empower these stakeholders to mobilise the required finance to meet the 3XRenewables target by 2030 and the Paris Agreement goals.

Action areas to scale-up renewable energy financing and triple renewables by 2030:

1. **Anchor renewable energy at the top of countries' political agendas and translate into policy:**
    a. Governments should integrate renewable energy beyond the energy and climate agendas and into security, economic, political, social and development agendas, recognizing its wide-ranging benefits[8]. The COP28 global tripling renewables by 2030 target should now inform national energy planning and be reflected in new and updated Nationally Determined Contributions (NDCs) due in 2025. Currently, many NDCs lack critical information for investors, such as sector-specific policies and mechanisms to address climate risks. The February 2025 NDC round is an opportunity to turn the tripling renewables commitment into actionable, investment-ready plans.

[7] GRA conducted research and stakeholder consultations, including with its Financing Advisory Group.
[8] including enormous savings (e.g. long duration energy storage saves USD $540 billion a year - LDES).

b. Creating investible NDCs is essential for sending clear market and financing signals to industry and financiers on the tripling renewables goal. .Comprehensive government plans for the energy transition provide credibility and send strong market signals. Countries' renewable energy targets, roadmaps, and plans need to be aligned with the goal of tripling renewables by 2030, and include them in ambitious and investible NDCs to attract investors, and be backed up by financing strategies, viable implementation through strengthened domestic policy frameworks and adherence to international agreements, ensuring multilateral goals lead to real-world action;
c. Repurpose select public capital flows and development financing from the conventional energy sector to renewable energy infrastructure in pursuit of the 3XRenewables by 2030 and Paris Agreement goals;

2. **Strengthen enabling environments through policy and regulatory stability:**
   a. A supportive and enabling environment for renewable energy investment remains a priority for advanced economies and EMDEs alike. Despite being a recurring recommendation, additional efforts are needed to ensure broad energy, climate, financing and investment policy support for stable policy and regulatory frameworks, from which a conducive environment for the scale-up of renewable projects can emerge towards 2030 and beyond. Strengthening capacity of institutional actors will be key to reliable permitting and regulation that doesn't hinder renewable deployment growth;
   b. Facilitating long-term revenue certainty through mechanisms such as fixed price PPAs and Contracts for Difference (CfDs), ensuring adequate indexing to protect against inflation, delivering microfinance for small-scale renewables, and ensuring auctioning supports sustainable pricing that adequately balances risk and reward, are all vital for renewable energy project bankability;
   c. Long-term targets and policy stability are key to delive investor confidence. Simultaneously, policymakers should also consult widely to ensure all stakeholders views on barriers that are considered and policies need to remain adaptable to changing market conditions and new challenges and opportunities as the energy transition accelerates;

3. **Minimise the gap between real and perceived risk:**

a. To mobilise renewable energy investments, financiers and credit rating agencies must align risk assessments with the specificities and returns of renewable projects and their geographies. Accurately measuring real risks and addressing perceived ones, is key to preventing overstated risks, which can cause unnecessary costs, and/or higher premiums;
b. This requires improving risk mitigation tools, their accessibility, and the speed at which they can be deployed (e.g. through standardisation). Providing stable policy signals and informing financiers on the actual risk profiles of both renewable and fossil fuel projects remains essential. The GRA is keen to work with investors, agencies and other national and regional providers in this space on this;
c. Sharing risk data across geographies and technologies, and emphasising long-term stability and predictable returns will help attract private capital, accurately price risks, and ultimately reduce financing costs for EMDEs.

4. **Encourage private financiers to expand their investment horizons:**
    a. While many already do so, traditional private financiers (e.g., pension funds, venture capitals, private equity, insurance companies, international banks) should be constantly reassessing markets to see if they can broaden their scope to support renewable energy projects, especially in EMDEs. Collaborating with local investors at national jurisdiction level and entities that have a solid understanding of local realities can help understand local risks.
    b. By moving beyond traditional, low-risk investments and exploring opportunities for emerging market projects, private investors can play a crucial role in the energy transition. This involves leveraging well-designed financing structures like blended finance and guarantees, to mitigate real and perceived risks and diversify asset exposure.
    c. Updating impact metrics, eligibility criteria, renewable energy technology project knowledge, and perceptions of renewable energy projects to reflect market and technological realities as well as environmental costs is essential, especially in terms of risks and rewards for institutions not familiar with specific markets.

d. Public finance institutions can assist by providing necessary risk mitigation tools (such as templates with criteria to help policy makers and investors with consistent language) and constantly assess if they are targeting markets that need these products from public institutions to ensure scarce public resources are used where most needed.

5. **Support domestic capital markets:**
   a. Leveraging domestic capital reduces reliance on international funds, lowers transaction costs and currency exchange risks, and promotes economic stability. This approach also ensures a steady flow of capital, can lower financing costs for project developers and therefore accelerate renewable energy adoption.
   b. Strengthening regional and local financial markets in EMDEs is key to building and unlocking local capital markets for renewable energy projects and expanding local fiscal space. While capital for infrastructure can be available through local financiers, building capacity within local banks and financial institutions helps make project risks and opportunities more transparent to local and international investors.
   c. This includes capacity building on renewable energy financing and developing financial products suited to local contexts, including the need for market tools such as PPAs that incorporate renewable energy technologies and storage, as streamlining and portfolio approaches adds financial benefit.

6. **Deliver blended finance through public-private collaboration:**
   a. Public and private financiers must strengthen collaboration to harness their combined strengths — public financiers can offer concessional financing, guarantees, and risk mitigation instruments, while private investors bring capital efficiency, innovation, and scalability.
   b. Private investment decisions are shaped by a combination of policy frameworks and the availability of public finance, particularly in EMDEs. Joint engagement helps public financiers understand market-specific challenges and tailor financial instruments to effectively leverage private capital.
   c. To maximise impact with limited public funds, development finance should prioritise blended finance structures, combining concessional and commercial finance from, for example, public and philanthropic sources.

d. Public financiers must become more agile, reduce lead times and red tape to accelerate financing disbursement.

7. **Direct public finance to where it's needed most:**
   a. Public financiers (e.g. DFIs, MDBs, etc.) should focus on providing financing in geographies, technologies and investment types where private finance is hesitant or still too costly, due to higher risk profiles, with the aim of transforming projects that are not yet bankable or investable in the private financiers' eye, into investment-grade projects.
   b. While risk mitigation is not the only role of International Finance Institutions (IFIs), public finance has a vital role to play in making these projects investable by reducing real and perceived risks for private financiers, to unlock private investment. This can be done by supporting projects earlier in the project development stages, supporting equity investments, and providing risk mitigation instruments to co-invest with private sector finance.
   c. Public finance should complement, not compete with, private financiers, and catalyse investments in challenging regions.

8. **Develop early-stage financing mechanisms to increase the pipeline of bankable and investable projects:**
   a. Building a pipeline of bankable projects requires mechanisms like direct government procurement, market policies such as targeted auctions, and public finance for early-stage project development.
   b. In EMDEs, existing financing often fails to cover early-stage risks, such as feasibility studies and initial project development capital expenditures, which are critical for projects to reach financial close and attract private investment. Addressing these early-stage risks is essential to creating a robust pipeline of projects that can secure private sector funding.

9. **Enhance data and knowledge sharing:**
   a. Investors need credible data and knowledge, especially in EMDEs, in order to accurately assess risks and confidently invest. Sharing global best practices and success stories, particularly through existing platforms, can quickly reduce perceived risks and boost investor confidence faster than relearning existing knowledge applicable in other jurisdictions.

b. Emphasising the dissemination of data on innovative financing tools, market conditions, default rates, and data resources like zoning plans and high-resolution mapping is crucial for reducing early-stage risks and facilitating informed investment decisions. Although these tools are generally applicable, they will need to be adapted to national circumstances.

10. **Establish an industry-government-financial sector trialogue on renewables**:
    a. Increased dialogue between the renewable energy industry, private and public financiers, and governments is needed to navigate renewable energy financing challenges and align on mobilizing international capital for delivering national energy goals.
    b. Collaboration can clarify assumptions, address risk perceptions, highlight successful cases, provide reality checks to overcome risk perception and return versus reward expectations, and build investor confidence.

The Global Renewables Alliance is ready to support governments, financiers and industry in delivering on this agenda.