



Scaling up financing for the energy transition

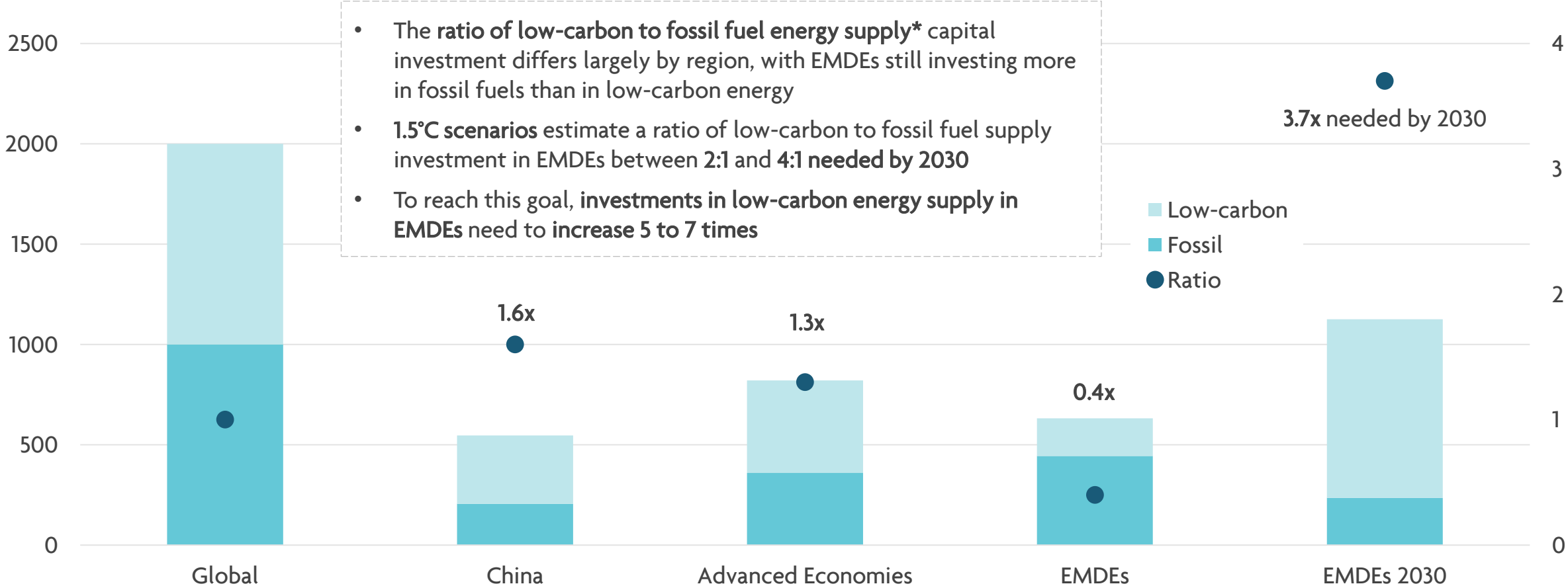
Overview and key recommendations

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Energy investment landscape

Capital flows are not meeting energy transition needs in EMDEs

Energy supply capital investment by country group
US\$ bn, %

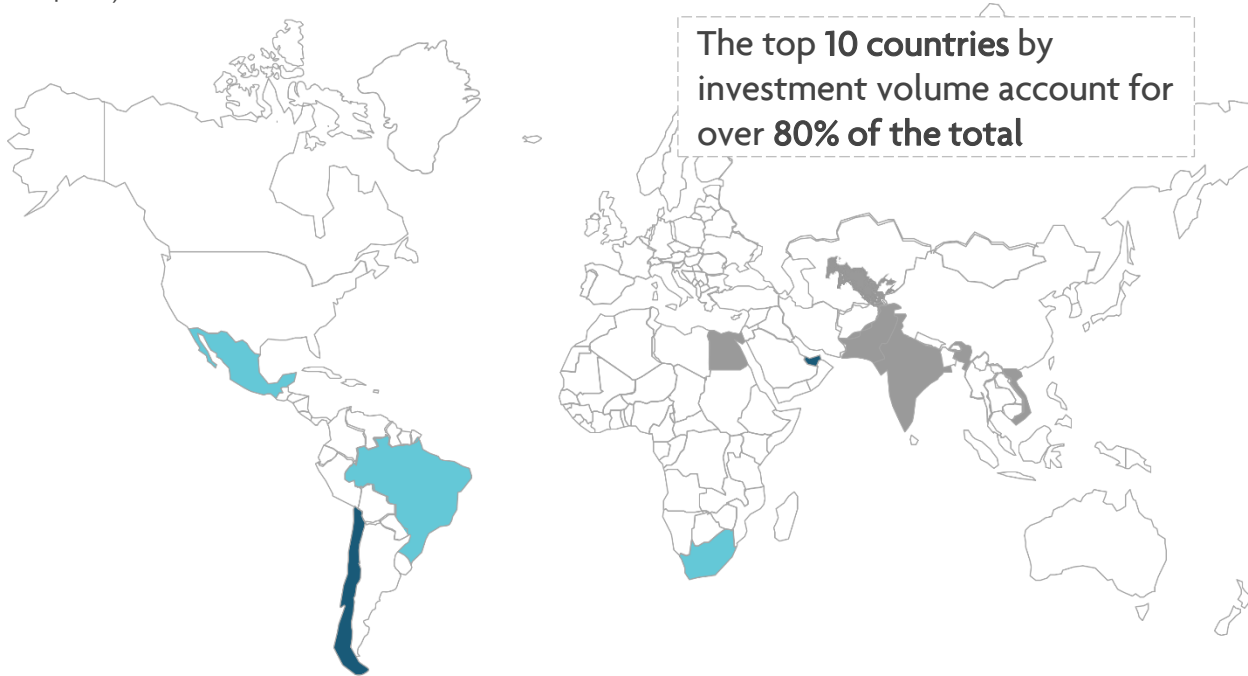


* Low-carbon energy supply includes renewable energy (including small-scale solar), nuclear, carbon capture and storage, energy storage and hydrogen; excludes transmission and distribution, large hydro and fossil-fuel based energy with abatement.. Source: BNEF – “Mobilizing Capital in and to Emerging Markets”, 2023

Renewable energy investment in EMDEs

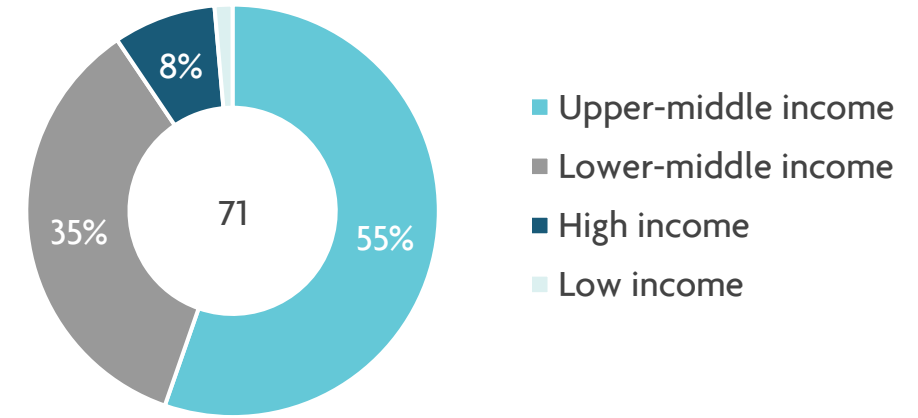
High level of concentration in a handful of countries

Top 10 EMDEs ex-China by renewable energy investment* volume
US\$ bn, 2022



- | | |
|----------------------|----------------|
| 1. Brazil – 35% | 6. Mexico |
| 2. India – 17% | 7. Vietnam |
| 3. South Africa – 8% | 8. UAE |
| 4. Pakistan – 4% | 9. Chile |
| 5. Egypt – 5% | 10. Uzbekistan |

EMDE renewable energy investment by World Bank income group**
% US\$ bn, 2022



- **Low-income** countries were responsible for **less than 2%** of renewable energy investments in 2022
- Investments in **upper-middle income** countries **grew 58%** in 2022 and are now a **majority** for the first time since 2013
- **Brazil and India** alone were responsible for **more than half** of investments in 2022

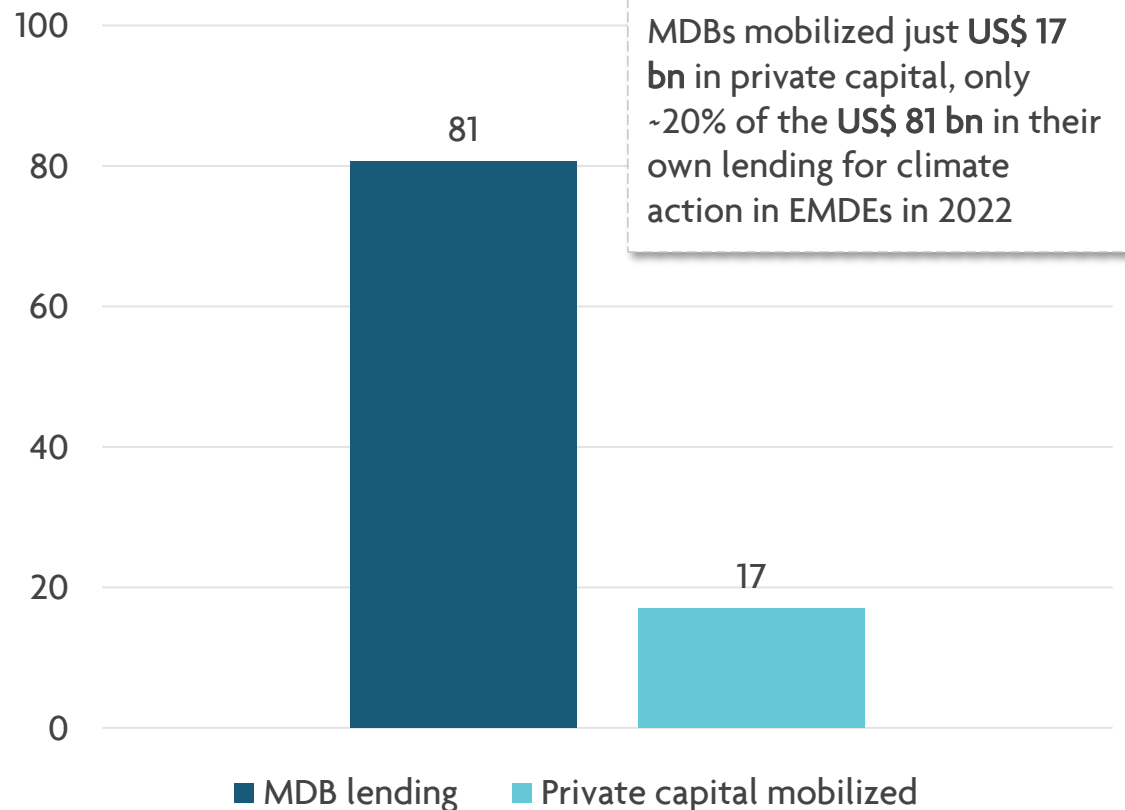
* Renewable energy investment represents 83% of total low-carbon energy supply, and includes utility-scale solar, wind biomass and waste, geothermal, marine and small hydro projects, in addition to small-scale PV ** Based on GNI per capita (Low-income: <= US\$ 1.135/capita; Lower-middle income: US\$ 1.136 – 4.465/capita; Upper-middle income: US\$ 4.466 – 13.845/capita; High income: > US\$ 13.845/capita). Sources: BNEF – “Mobilizing Capital in and to Emerging Markets”, 2023 ; World Bank

Opportunities for MDBs

Institutions should act as catalysts for private investments and diversify their portfolios

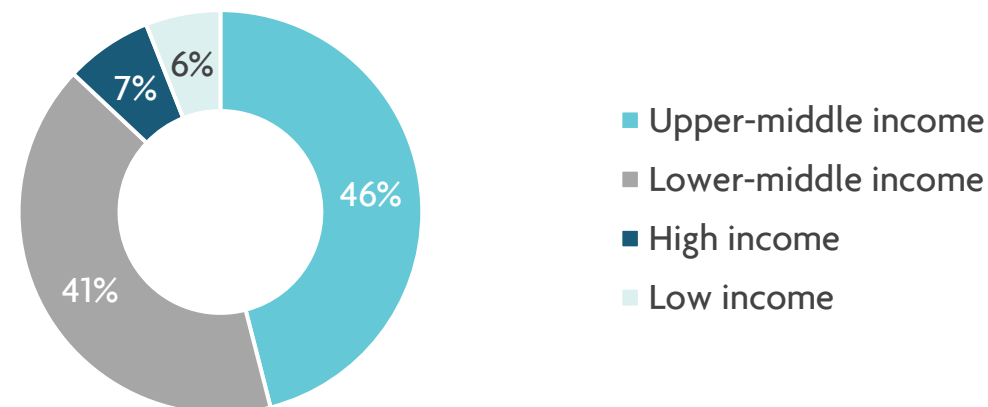
MDBs are not mobilizing enough private finance

US\$ bn mobilized for climate action by MDBs, 2022



MDBs investment is also concentrated in middle-income countries

% renewable energy foreign direct investment to EMDEs from MDBs by income group, 2012-2022



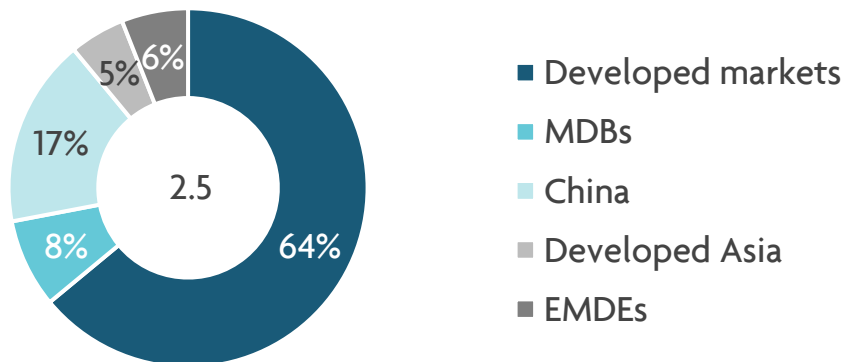
- **Middle-income countries** accounted for **87%** of investments provided by MDBs to renewable energy projects from 2012-2022
- **Low-income countries** represented just **6%** of total investments from 2012 to 2022, **less than the 7% destined for high-income countries**

Innovative finance mechanisms

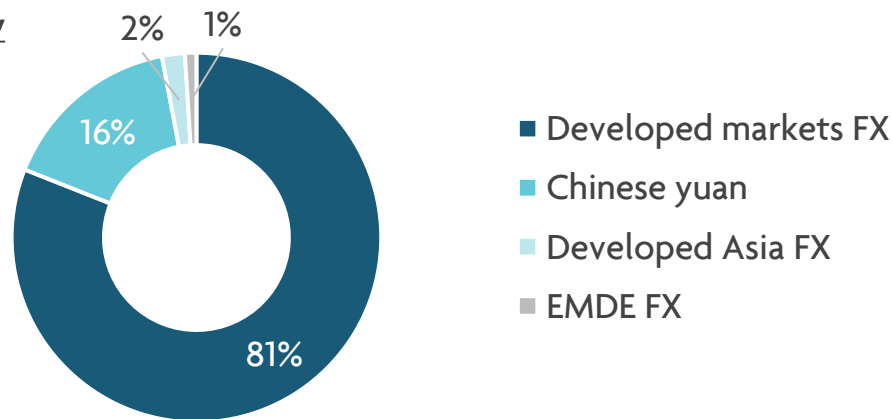
Green bonds are not channeling resources toward the energy transition in EMDEs

The green bond market is dominated by advanced economies
%, US\$ tn cumulative global green bond issuance, until June 2023

By market



By currency



Investment guidelines restrict non-investment grade (IG) debt from portfolios

Examples of indexes

Index	EMDE local FX bonds limited/ restricted	Rating restriction	Currency restriction
FTSE Global Green Impact Bond Index	No	None	Multi-currency
Solactive Green Bond Index	Yes	IG only	USD, GBP, EUR
Bloomberg Barclays MSCI Global Green Bond Index	Yes	IG only	Multi-currency
S&P Green Bond Select Index	Yes	IG only	G10* currencies
J.P Morgan EM Credit Green Bond Diversified Index	Yes	None	Hard currencies

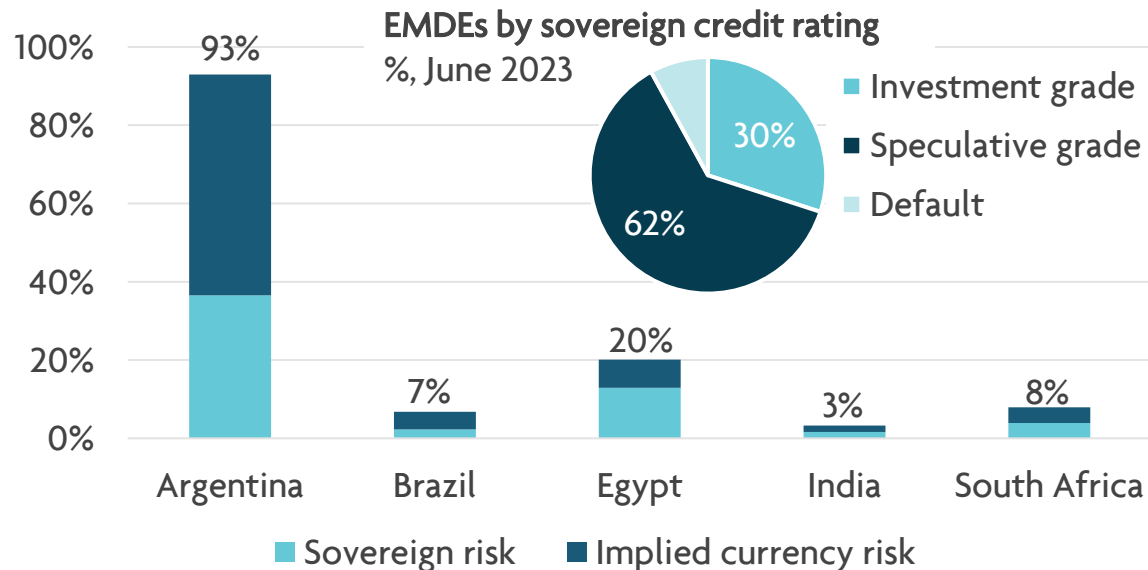
Domestic conditions are key

Countries need to improve business environment to mitigate high risk perception

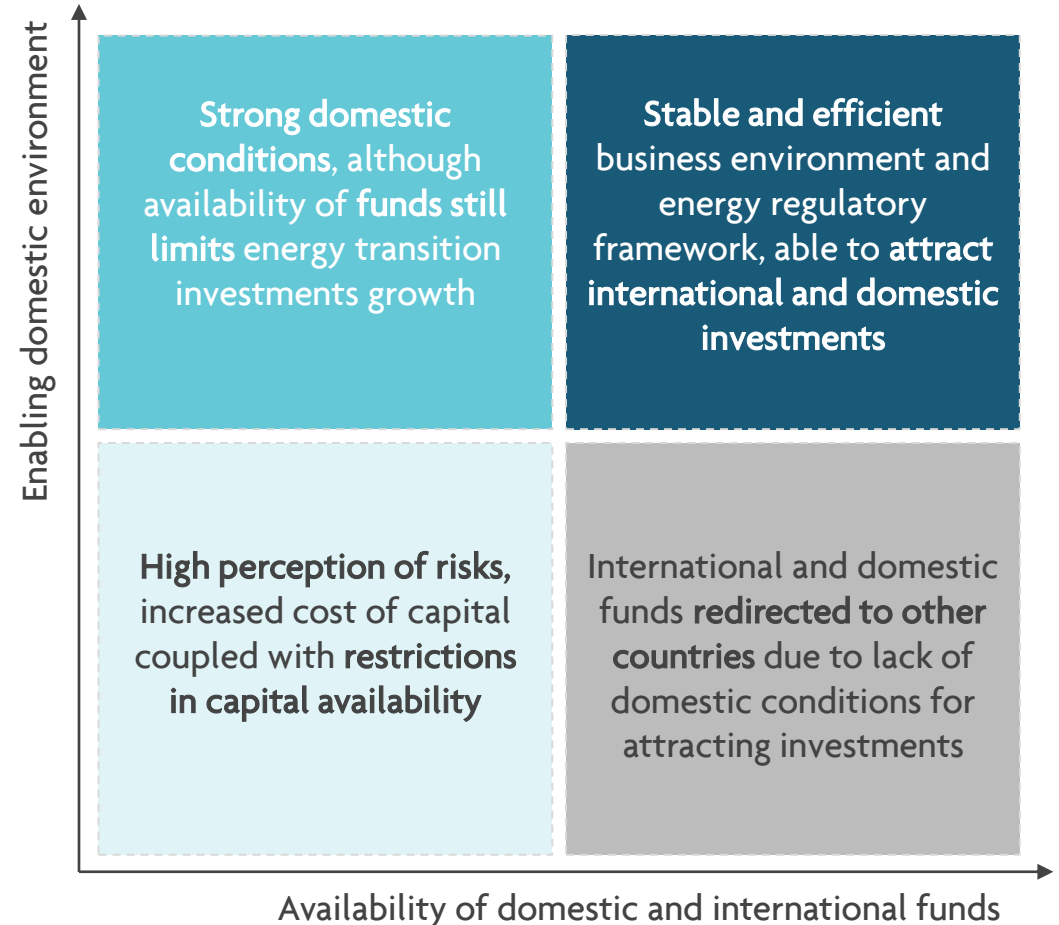
Energy transition investment risk in EMDEs is mostly linked to country aspects

- According to the IEA, **project and sector-specific elements** are responsible for **20-30%** of the higher cost of capital in EMDEs
- Broad country-related risks and macroeconomic factors account for a large share of country-by-country variations in the **cost of capital**

Country risk impact on renewable energy cost-of-debt in local currency
%, June 2023



Scaling up financing for the energy transition



Catavento and CEBRI roundtable under G20 ETWG

Engaging a diverse set of stakeholders involved in the financing and energy ecosystems



On March 26th, Catavento and CEBRI hosted the “Scaling up financing for the energy transition” roundtable



34 participants, including 19 in-person in CEBRI’s Rio de Janeiro headquarters and 15 through remote connection



10 companies directly involved in the global energy transition



9 international research institutions



6 financial institutions, including private investors, and development banks



Innovative mechanisms for scaling up financing for the energy transition

- Role of multilateral finance institutions
- Most efficient tools and innovative solutions to reduce the cost of capital in EMDEs, both at the macro and micro levels
- Governments and public policies needed to upscale investments



Market conditions to unlock Final Investment Decisions (FIDs)

- Challenges for project developers and potential solutions
- Differences among mature technologies and new business models, as well as the role of incumbent energy players



Recommendations for the G20 ETWG

Key recommendations

1. Amplify and de-risk energy transition investments through innovative mechanisms



Enhance the role of multilateral development banks (MDBs) to bolster their lending capacity and catalyze private capital

- Engage with funders to enable a new positioning for MDBs, including the revision of their mandates and governance, preserving ratings
- Facilitate the redirection of funds restricted to investment-grade and OECD countries towards EMDEs through blended finance
- Expand the portfolio diversification approach to tackle country and innovation risks across multiple regions and technologies



Implement innovative tools to attract private capital in EMDEs

- Provide extended guarantees and mechanisms to reduce the cost of exchange rate hedging
- Maximize financing instruments such as sovereign green debt and high-integrity voluntary carbon markets to channel resources
- Foster technical and advisory capacity building in EMDEs, taking into consideration energy security and affordability



Leverage private investors with energy transition appetite

- Develop a robust pipeline of projects with an attractive risk-return profile
- Attract institutional investors and energy-transition focused funds with a long-term investment horizon and interest in infrastructure
- Reinforce domestic capital markets to support the financing needs of projects effectively and reduce vulnerability to currency risk

Key recommendations

2. Improve domestic market conditions to achieve Final Investment Decisions



Ensure a clear, competitive and stable regulatory environment

- Improve existing regulations to keep pace with the evolving energy transition
- Develop robust regulatory frameworks for emerging low-carbon technologies
- Promote cost-effective decarbonization strategies through market mechanisms and a technology-neutral approach



Mitigate risk perception through reinforced institutions, predictability and strategic long-term planning

- Enhance macroeconomic conditions in EMDEs to improve credit ratings
- Foster a high-quality governance environment in the energy sector, avoiding political, regulatory and judicial interference
- Strengthen long-term energy planning through a systemic approach that encompasses sectors beyond electricity



Improve market conditions to attract energy transition projects

- Establish clear certification, standards and taxonomy compatible with international best-practices to enhance predictability
- Stimulate demand for low-carbon products and incentivize the willingness to pay for green premiums in long-term offtake agreements
- Build resilient and sustainable supply chains for energy-transition initiatives, such as critical minerals and transmission lines

Key recommendations

3. Promote multistakeholder platforms to foster collaboration and drive investment



Engage all stakeholders relevant to financing the energy transition, such as government officials, finance experts, MDBs, central banks and energy sector executives, to identify key obstacles and develop actionable plans, leveraging the unique strengths of each player



Set up platforms to stimulate dialogue and knowledge sharing, including matchmaking between investors and developers, and databases of bankable and scalable projects



Reach consensus on a clear global target for energy transition financing in EMDEs and the amount needed to be de-risked, prioritizing concessional finance for projects and countries that most need it, including initiatives with the greatest potential for emission reduction (e.g., coal phase-out, transport decarbonization)

Scaling up financing for the energy transition

Concept note



Download the concept note by scanning
the QR code above



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