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Dialing up climate finance in emerging markets

From the billions to trillions

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IN A NUTSHELL

— Emerging market and developing economies (EMDE) lie at the heart of reaching the commitments laid out in the Paris climate agreement since over the past decade more than 95% of the increase in greenhouse gas emissions have occurred in EMDE[1] and these countries will be the source of 98% of world population growth by the end of this decade[2]. The appointment of a new World Bank President may help promote this agenda[3]

— The 10 highest emitting CO_2 countries, accounting for two-thirds of total developing country emissions, received just 25% of total mitigation finance between 2016 and 2020[4]

— Climate mitigation efforts are largely deployed in the renewable energy generation and low-carbon transportation sectors. However, significantly larger capital investments are required since per capita clean energy investment in EMDE excluding China is less than a tenth of what it is in advanced economies[5]

— Chile, India and China are ranked as the top three clean energy investment country destinations[6]. The spread of carbon pricing schemes across EMDE countries is a step in the right direction to help incentivize climate-friendly investments

— But EM countries are still struggling to receive climate finance. This means innovative ways need to be found to crowd-in private sector investment. Public-private partnerships are one solution which can help unlock multilateral development banks' capital as well as de-risk EM investments for private sector investors

— EMDE countries are often punished by poor ESG quality scores yet in certain instances this can reflect global corporates outsourcing to these regions. For example, for many companies their supply chains can account for as much of 80% of their total climate impact[7]. As more corporates address their climate impact, we expect this may encourage the growth in outcome-based debt instruments such as sustainability linked bonds

— The adoption and spread of climate finance transition taxonomies across EMDE countries need to be encouraged as it will facilitate much needed disclosure and enhance transparency, welcome developments for private investors

[1] WEF (June 2022). 3 actions to accelerate emerging market climate transition
[2] UN world population prospects 2022 database
[3] Reuters (3 May 2023). World Bank board elects US nominee Ajay Banda as President
[4] Climate Policy Initiative (October 2022). Global landscape of climate finance: A decade of data
[5] IEA (October 2022). World Energy investment 2022
[6] BNEF Climatescope 2022 ranking https://global-climatescope.org/results/
[7] World Economic Forum (January 2021). Net-Zero Challenge: The supply chain opportunity

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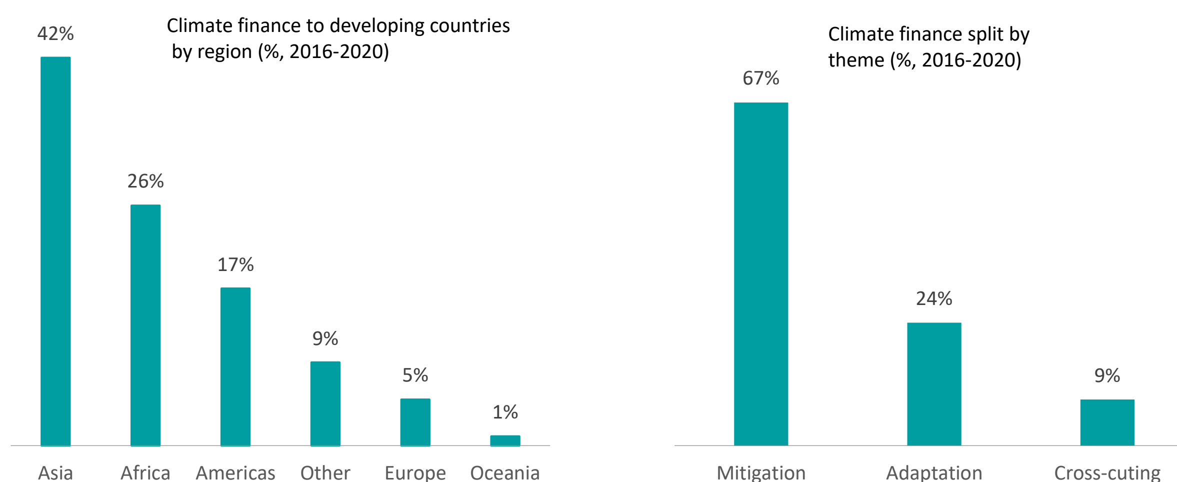
1 / Climate finance landscape

EMDE account for 85% of the world's human population[8], two-thirds of global greenhouse gas emissions[9] and 58% of both global foreign exchange reserves and world GDP[10]. We find that two-thirds of funds provided and mobilized from the developed to developing countries relate to climate mitigation projects. However, the 10 highest emitting CO_2 countries, accounting for two thirds of total developing country emissions, received just 25% of total mitigation finance between 2016 and 2020.

Figure 1: Climate finance to developing countries by geography and theme



Source: OECD (September 2022). Climate finance provided and mobilised by developing countries in 2016-2020

When measured on a per capita basis, the 50 lowest emitting developing countries are receiving more than five times the level of mitigation finance compared to the top 10 highest emitting countries. An indication that not only the total size of climate finance flows needs to be increased, but these should be increasingly channeled to the largest emitting countries. In terms of the sector destination of climate finance, renewable energy and low carbon transportation projects are capturing 63% of total mitigation finance, and 46% of total climate finance. In comparison, 40% of adaptation finance over the 2016 to 2020 period has been directed into water supply and sanitation as well as the agriculture, forestry and fishing sectors.

While just over 90% of emerging market countries have set long-term renewable energy targets, when it comes to corporate ambition to reduce greenhouse gas emissions, commitments are not as widespread[11]. Of approximately 4,500 companies who have signed up to the Science Based Targets (SBT) initiative, emerging market corporates account for less than one-fifth, with Emerging Asia accounting for more than half of this universe[12].

While there are divergences in the cash return as well as the valuation of companies according to whether or not they have or have not committed to a SBT, the large majority[13] of the companies aligned with SBTi are from non-carbon intensive sectors such as IT, Communication Services and Consumer Staples. In contrast, we find that SBT commitments have not made many in-roads in high carbon intensive sectors such as Energy, Materials or Utilities. In many instances, companies from these sectors will have little to no ability to meet science based emission reduction targets[14]. In any event, there is a need to scale up SBTi within the EM region, especially among high emitting countries and sectors.

[8] UN World population prospects 2022 database
[9] Netherlands Environment Agency (May 2020). Trends in global CO2 and total greenhouse gas emissions
[10] IMF WEO database (October 2022). Gross domestic product based on purchasing-power-parity share of world total; IMF International reserves https://www.imf.org/external/pubs/ft/ar/2022/downloads/appendix.pdf
[11] SBTI Progress Report 2021 (June 2022). Scaling urgent corporate climate action worldwide
[12] Data taken from SBTi as of January 19, 2023
[13] 78% by count, 68% by market cap and 90% by NCI – of the total companies which have SBTi association are from the IT, Communication Services and Consumer Staples sector.
[14] SBT (April 2022). Decarbonizing the energy sector: How the SBTi is approaching this transformation

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Clean energy investment case study: India

In 2022, India was ranked second behind Chile as the most attractive emerging market for clean power investment. This was based on the country's price attractiveness, regulatory environment, and experience[15].

India has set its ambition to increase its share of renewable power generating capacity from 23% to 50% by 2030[16].

According to BNEF, over the next eight years US$233 billion of funding will be required just to meet the country's solar and wind capacity targets[17].

A number of India's leading energy corporates such as NTPC[18], Reliance[19] and Tata Power[20] have made commitments to build their renewable energy capacity. Collectively the commitments made by domestic Indian companies imply at least a four-fold increase in renewable power generating capacity by 2030.

[15] BNEF Climatescope 2022 ranking https://global-climatescope.org/results/
[16] IEA (January 2022). India's clean energy transition is rapidly underway, benefiting the entire world
[17] BNEF (June 2022). Financing India's 2030 renewables ambition
[18] NTPC (Renewable Energy) https://www.ntpc.co.in/en/renewable-energy
[19] Reliance Industries Limited (August 2022) https://www.ril.com/DownloadFiles/ChairmanCommunications/RIL-AGM-45.pdf
[20] Financial Express (December 6, 2022). Tata power eyes five-fold hike in green energy capacity by 2030

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2 / Climate financing requirements

Annual global climate finance flows need to increase from an estimated US$850 billion in 2021 to between US$4.3 trillion and US$9.3 trillion by 2030 to avoid the worst effects of climate change[21]. This lower target is equivalent to just 4% of global GDP or 6% of the combined assets under management of signatories to the Asset Owners Net Zero Alliance and the Net Zero Asset Managers initiative[22].

For EMDE, to mitigate the effects of climate change and reduce greenhouse gas emissions, it is estimated that investments in energy infrastructure alone must be at least US$1 trillion by 2030. This means a significant scaling up of investments is required particularly in emerging markets outside China.

With increasing investment flows heading towards higher-rated ESG securities, emerging market issuers are typically placed at a disadvantage with lower-rated ESG scores and so lower allocations in dedicated ESG funds.

Steps to improve the climate finance environment, crowd in private sector capital and close the investment financing gap can be facilitated by:

1. Removing fossil fuel subsidies and introducing a suitable price on carbon
2. Using public sector balance sheets to help de-risk investments for private sector investors
3. Improving climate data, disclosures and taxonomies across emerging markets

Progress in these areas is taking place. For example, public-private sector climate finance partnerships such as the Indonesia case study below as well as proposals at COP27 to reform the IMF and World Bank[23]. In addition, the development of green taxonomies across an increasing number of emerging markets[24] for example Asia (China, Indonesia, Malaysia, Singapore, South Korea, Taiwan, Thailand), South America (Chile, Colombia, Mexico) and Africa (South Africa) may help over time to overcome this handicap. And the Indian government's bill to introduce a voluntary carbon trading scheme[25].

Public-private climate financing case study: Indonesia

Indonesia is the world's fourth most populous country, accounts for 1.7% of global CO2 emissions and by 2050 will be the world's fourth largest economy, after China, India and the United States[26]. Efforts to drive the country's clean energy transition have been the focus of global climate negotiations recently, which has culminated in the Indonesia Just Energy Transition Partnership (ETP)[27].

This coal power transition facility signed by the governments of major economics at the G20 summit in Bali last year aims to assist in Indonesia's goals to achieve a peak in power sector emissions by 2030 and increase the share of renewable energy generation to at least 34% of all power generation over the same period.

From a financing perspective, the partnership intends to mobilise an initial US$20 billion in public and private financing over a three-to-five-year period.

[21] Climate Policy Initiative (October 2022). Global landscape of climate finance: A decade of data
[22] DWS Investment GmbH analysis (October 2022)
[23] WEF (January 2023). The Bridgetown Initiative: Here's everything you need to know
[24] Eco:Fact (November 2022). Green taxonomies around the world: where do we stand?
[25] Reuters (December 2022). India to bolster carbon trading market with stabilization fund
[26] IES (September 2022). An energy sector roadmap to net zero emissions in Indonesia
[27] The White House (November 2022). Indonesia and International partners secure groundbreaking climate targets and associated financing

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3 / Appendix

Climate finance investment flows are classified according to three types:

1. Climate mitigation finance refers to investments that aim to reduce or prevent greenhouse gas emissions. This can include the deployment or renewable energy generation, low-carbon transportation or upgrading existing equipment to become more energy efficient
2. Climate adaptation finance refers to investments that help build resilience to the effects of climate change. This can include building flood defenses, establishing early warning systems for tornadoes or switching to drought-resistant crops
3. Loss and damage is the third pillar of climate finance. This relates to financing when efforts to reduce emissions are not ambitious enough and when adaptation efforts are unsuccessful or impossible to implement[28]

According to global climate financing data, approximately 90% of climate finance flows relate to mitigation finance. When it comes to developing countries, mitigation finance in the five years to 2020 accounted for roughly two-thirds of climate flows[29]. While global climate finance flows are now evenly split between public and private sector actors, public sector flows have been growing at a faster clip. But gaps in datasets continue to persist. Figure 1 illustrates that the tracking of climate finance flows are more advanced when it comes to public sector flows from the Global North to the Global South[30] but fall short elsewhere.

Figure 2: Data gaps in climate finance need to be plugged

Data gaps	Energy Systems	Buildings & Infrastructure	Transport	Industry	Land Use	Adaptation	Other
Private	Tracked	Some tracking	Some tracking	No tracking	No tracking	Limited tracking	Limited tracking
Global North-South	Tracked	Tracked	Tracked	Tracked	Tracked	Tracked	Some tracking
Public domestic	Some tracking	Some tracking	Some tracking	No tracking	No tracking	No tracking	No tracking
Global South-South	Limited tracking	Limited tracking	Limited tracking	No tracking	No tracking	No tracking	No tracking

Legends: Tracked; Some tracking; Limited tracking; No tracking

Source: Global Policy Initiative (October 2022). Global landscape of climate finance: A decade of data

[28] WRI (December 2022). What is loss and damage from climate change? 8 key questions, answered
[29] OECD (September 2022). Climate finance provided and mobilised by developing countries in 2016-2020
[30] OECD data covers financing from development banks and agencies, export credits and private finance mobilised by bilateral and multilateral public climate finance

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