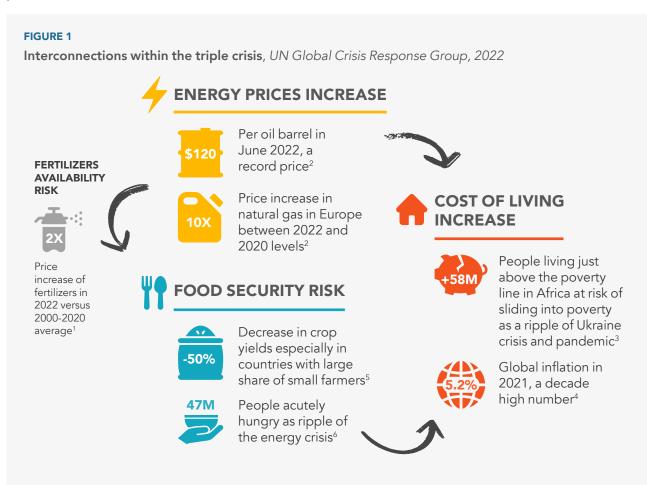
The energy transition: a catalyst to address the global triple crisis

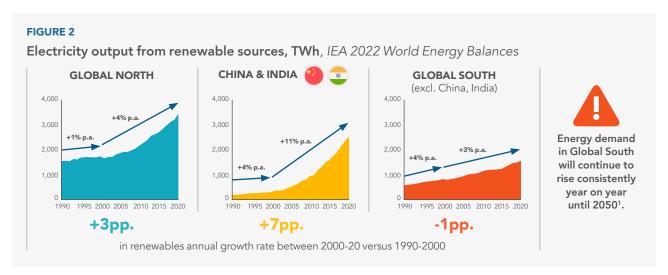


The world is currently facing a triple crisis—severe cost of living, energy security, and food security challenges are impacting most of the world, but their effects are disproportionately felt by developing countries and vulnerable communities. These crises, coupled with the ongoing climate crisis, hamper progress on development priorities, including action on climate change. Although these crises are distinct, they are deeply interlinked, primarily through the rising energy prices affecting both the overall cost of living as well as the availability of fuel and fertilizers, which in turn directly impact agricultural productivity (Figure 1).



- . UNCTAD, forthcoming, The war in Ukraine: What it means for the logistics of international trade.
- 2. World Bank, 2022, Commodity markets outlook 3. United Nations Economic Commission for Africa (UNECA), 2022
- 4. United Nations, Inter-agency Task Force on Financing for Development (2022). Financing for Sustainable Development Report 2022 5. BBC (2022) Ukraine war 'catastrophic for global food'
- 6. World Food Program (2022)

The global energy transition towards cleaner and more sustainable energy sources for all sectors presents a significant opportunity to address these crises through its cost benefits, job creation potential, local market creation, and climate benefits.



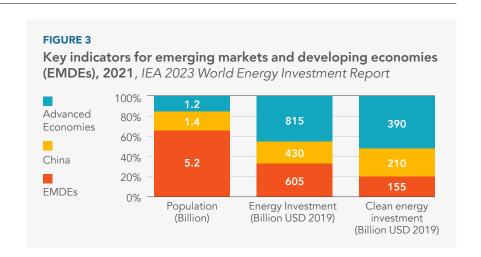
1. 2021-2050 annual energy demand growth rate of 2% for Southeast Asia (excl. China) and for Africa based on IEA Stated Policies scenario

Countries around the world, in particular developing countries that face a disproportionate amount of climate vulnerabilities, have demonstrated a deep commitment to advancing the uptake of renewable energy to meet their development goals. However, evidence shows that uptake has been lagging in emerging markets and developing economies (EMDEs). The pace of growth of renewables generation has decreased in the Global South (-1pp. in annual growth rate between 2000-2020 versus 1990-2000) while it significantly increased in the Global North (+3pp.) and China/India (+7pp.) in the last 20 years (Figure 2). This is especially challenging as energy demand in developing countries continues to rise consistently year-on-year.

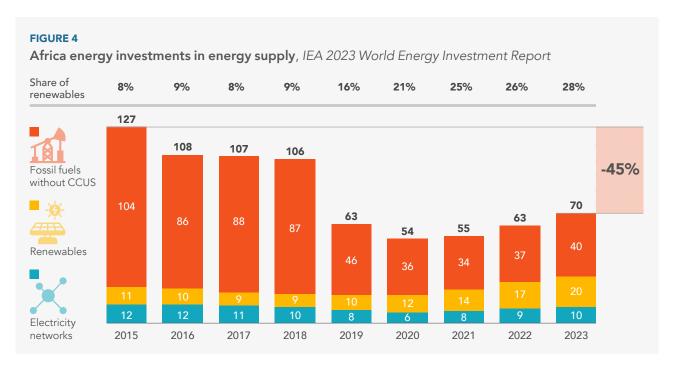
The slow pace of renewables deployment in emerging markets and developing economies (EMDEs) versus developed countries is mainly due to two core elements: the lack of access to capital and the high cost of capital in those countries.

LACK OF ACCESS TO CAPITAL

In 2021, EMDEs accounted for two-thirds of the world's population but only one-third of total energy investment. The gap grows further with only 20% of global investment in clean energy technologies going to emerging and developing economies, not including China (Figure 3).

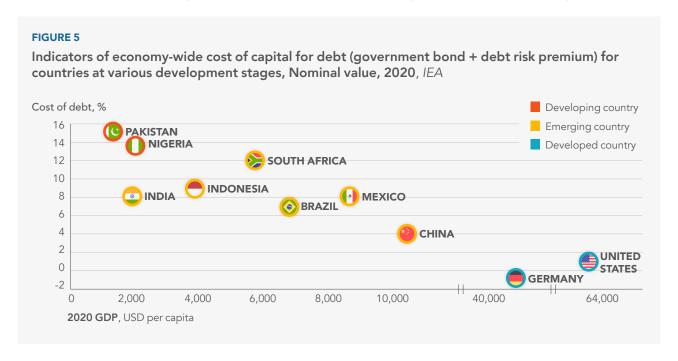


A striking example is Africa in which total energy supply investments have been shrinking with the decline in fossil fuel investment not offset by the increase in renewables investment (Figure 4).

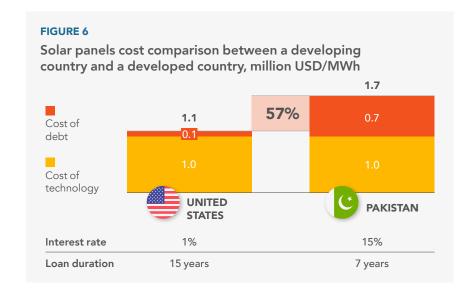


HIGH COST OF CAPITAL

The capital that is flowing into developing and emerging economies is not only limited in scale, but is also often prohibitively priced, with significantly higher interest rates prevailing in developing countries (Figure 5). This high cost of capital significantly diminishes the economic advantage of renewable energy solutions in developing countries, further limiting the pace and scale of their uptake.



For instance, assuming a similar cost of technology for solar PV in the global market of USD 1 million/ MW financed through 30% equity and 70% debt, the cost of capital would raise the cost of technology to USD 1.7 million in Pakistan versus USD 1.1 million in the United States, a 57% difference (Figure 6).



Consequently, it becomes apparent that the energy transition requires as much innovation in market design and access to finance as it does in technology innovation and unit economics. The risk profile of clean energy solutions is intimately intertwined with the broader financial crisis faced by EMDEs, which continues to prohibit those with the least contribution to the climate crisis, and the worst affected by it, to act decisively and at scale on climate mitigation without interventions that address this twin finance challenge. Hence, to unlock renewable energy consumption, systemic catalytic financial solutions are required and can be delivered through targeted actions across three objectives (Figure 7).

