

Climate finance is a key driver to clean energy transition —highlights in the IEA

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The International Energy Agency's (IEA) World Energy Outlook 2024 is launched at a critical era in the global energy systems, emphasizing the intertwined issues of energy security, climate action, and financing clean energy transitions. With escalating geopolitical tensions and growing impacts of climate change, the IEA's flagship report provides a roadmap for the urgent scale-up of investment in clean energy to meet global climate goals. The report underscores the importance of climate finance, especially for developing economies, as a key driver to achieving the energy transition necessary to limit global warming and improve energy access.

While clean energy technologies such as solar, wind, and nuclear power have taken a momentum growth globally, the Outlook highlights a glaring imbalance in investment flows between advanced economies and developing countries. According to the report, 85% of clean energy investment in 2024 will occur in advanced economies and China, leaving only 15% for emerging and developing economies (see figure 1), where more than two-thirds of global population lives. A key driver of clean energy sector growth is government policy, with China leading to the race by contributing about 1/3 of global clean energy investment amounting to around USD 675 billion, which is equivalent to the combined investments in Europe and the US. The underinvestment in developing countries hampers these regions' capacity to transition to cleaner energy systems, even as their energy demands are set to rise substantially due to economic growth and continuous rise in population.

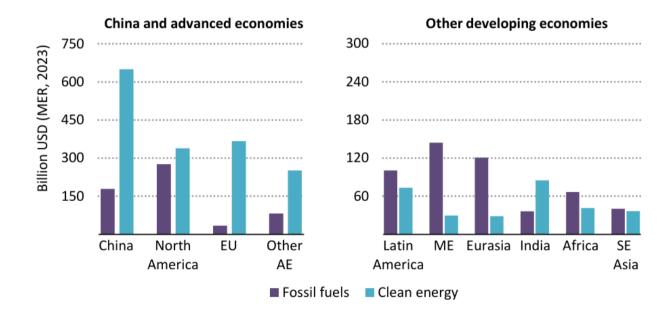


Figure 1: Estimated clean energy investment is made in advanced economies and China vs. the rest of emerging and developing economies, 2024 (Source: IEA, 2024)

The cost of capital remains a major barrier to the deployment of clean energy in emerging markets. For instance, the costs of financing solar PV projects can be 2 to 3 times higher in developing countries compared to advanced economies due to high risks in emerging markets. Without more affordable long-term financing, emerging economies are at risk of being left behind in the global energy transition, even though they are critical to achieving global climate targets.

The 2024 World Energy Outlook presents a stark reality that global energy investment is projected to exceed USD 3 trillion for the first time in 2024, with about USD 2 trillion directed toward clean energy technologies and infrastructure, and about USD 1 trillion to fossil fuels. This is a substantial shift from a decade ago when 60% of global energy investment went toward fossil fuels. Today, for every USD invested in fossil fuels, approximately USD 2 is invested in clean energy - a ratio that is expected to rise further in coming years, particularly in scenarios aiming for Net Zero Emissions (NZE) by 2035. However, to meet the global target of limiting warming to 1.5°C, the world needs a 2.5-fold increase in clean energy investments from current levels, especially in power generation, battery storage, and grid infrastructure.

The Outlook stresses that meeting these investment goals will require addressing the regional imbalances in climate finance. It calls for more robust mechanisms to unlock concessional finance and reduce the high cost of capital in emerging markets. Concessional finance, including guarantees and first-loss capital, has played a critical role in mobilizing private sector investments in clean energy, particularly for infrastructure projects like electricity access and clean cooking solutions. The need for concessional finance is particularly acute in sub-Saharan Africa (SSA), where achieving universal energy access by 2030 will require about two-thirds of the over USD 55 billion needed annually. The Outlook revealed that in the entire SSA where we have more than half of the global solar radiation, every second person does not have access to electricity, yet the amount of solar electricity generated in SSA is less than solar electricity produced in Nederland, which is really disturbing. Furthermore, carbon market mechanisms like cookstove credits have helped raise finance for energy access projects, but more scalable solutions are needed to address the immense funding gap.

The Outlook also highlights that international financial institutions and development banks have a pivotal role in bridging this funding gap. Increased public and concessional finance can de-risk investments, attract more private capital, and ultimately enable the accelerated deployment of clean energy in developing regions. The Outlook makes it clear that clean energy transitions and energy security are inextricably linked. As geopolitical risks persist, clean energy technologies offer a pathway to reduce dependencies on volatile fossil fuel markets while mitigating the worst impacts of climate change. However, without adequate financial flows to emerging markets, the global effort to limit warming to 1.5°C is unlikely to succeed.

Countries representing half of global energy demand will hold elections in 2024, with climate and energy issues already prominent in many campaigns. The outcome of these elections could significantly impact future policy directions, either accelerating or hindering the pace of clean energy transitions globally. The IEA's NZE scenario charts a pathway where fossil fuel investments decline by 75% by 2035, but only if clean energy investment increases dramatically. By 2050, the world could achieve a fully decarbonized power sector, driven by renewables, grids, and battery storage, but this will require coordinated international efforts to mobilize climate finance.

In conclusion, the Outlook sends a clear message that climate finance is central to achieving a just and equitable energy transition. However, without stronger financial support for developing economies, the global effort to meet climate targets will falter. Advanced economies must not only lead in reducing emissions but also in financing the clean energy transition in emerging markets. This is a collective effort that will define the future of global energy security and climate resilience. As the world prepares for COP29, the urgency of scaling climate finance has never been greater. Decisions made now will shape the energy landscape for decades, determining whether the world can collectively steer toward a sustainable, resilient, and equitable future.



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