

Cooking maize near a solar lamp,
a clean and safe source of energy.

POWERING GROWTH

African countries are embracing renewables to accelerate energy access, but funding remains a challenge

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In most of the world, energy demand continues to increase, but hundreds of millions of people in Africa lack basic access to electricity and cook using dirty fuels. According to a 2019 report by the International Energy Agency (IEA) 770 million people have no electricity—75 percent of whom live in sub-Saharan Africa—and 900 million lack access to clean cooking in the region. This can limit educational and business opportunities, as well as people's economic prospects and well-being.

Missing the mark

Closing the energy access gap in sub-Saharan African countries will require an estimated annual investment of \$28 billion up to 2030, according to the IEA. This includes about \$13 billion for mini-grids; another \$7.5 billion is needed for grid and \$6.5 billion for off-grid investments. Current financing commitments fall far short, with major gaps in countries such as Chad, Ethiopia, and Nigeria—all major population growth hubs. Similarly, the \$131 million committed for clean cooking is just a fraction of the \$4.5 billion needed by 2030. Countries like the Democratic Republic of the Congo and

Ethiopia, where 95 percent of the population lacks access to clean cooking, receive less than 1 percent of the annual investment.

Significant financial commitments are needed to close this gap. However, challenges persist, including political instability, macroeconomic uncertainty (because of inflation and exchange rates), policy and regulatory issues, institutional weaknesses, and lack of transparency. All these make for a less favorable investment climate, alongside market failures and lack of aid to channel financing where it is needed most (see chart).

Several developed economies have already failed to deliver on their pledge of \$100 billion annually in climate finance and are cutting foreign aid, at a time when investment needs to be doubled. The UN Climate Change Conference (COP26) and the Energy Transition Council should play a central role in driving urgent mobilization of capital for clean energy investment in the region.

Despite these challenges, there are successful initiatives that, if replicated, could help mobilize needed capital. For example, the Sustainable Use of Natural Resources and Energy Finance initiative—a French Development Agency facility—catalyzes commercial lending to the clean energy sector and has helped finance more than 60 projects in both commercial and industrial sectors, as well as on-grid projects across Kenya, Tanzania, and Uganda. It offers an integrated approach that provides banks and their clients with structured financing. It also offers technical assistance and support for companies in structuring their investments. The facility shares—through guarantee mechanisms—some credit risks borne by banks seeking to develop finance portfolios in renewable energy.

The Sustainable Energy Fund for Africa—a multi-donor fund established in 2011 and managed by the African Development Bank (AfDB)—has provided finance to unlock private sector investments in renewable energy and energy efficiency. Its technical assistance, as well as concessional and catalytic financing instruments, aim to de-risk investments in the sector and is targeted at green baseload power, green mini-grids, and energy efficiency. The fund facilitated the AfDB's first two scale-up programs in Burkina Faso and the Democratic Republic of the Congo and played a key role in the development of energy blended finance initiatives. These initiatives include the Africa Renewable Energy Fund, which has

catalyzed private sector funding through investments—for example, in Frontier Energy. Frontier Energy has invested over \$1.8 billion in more than 45 renewable energy projects in sub-Saharan Africa, with a total capacity of more than 750 megawatts.

In 2020, the AfDB, through the Sustainable Energy Fund for Africa, committed \$5 million to investment firms Enabling Capital and Spark+ to raise equity for clean cooking companies in the region. This funding, together with €10 million from the European Union through its blending facility, has attracted many investors, helping to mobilize capital for investment in clean cooking.

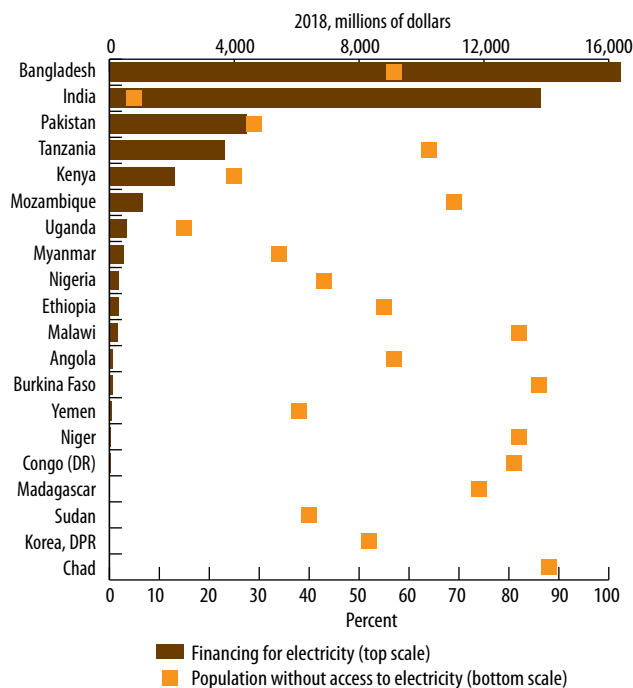
Unlocking financing

These initiatives represent just a few of the interventions that are helping unlock capital for clean energy investment in the region. But the pace and scale of funding must pick up. Here are five areas where COP26 commitments could help minimize barriers and meet needs.

- **De-risking investment in sub-Saharan Africa's clean energy sector:** Private investors are essential to financing renewable energy, but high costs and uncertain energy policies and regulations increase investors' risk perception. There are various de-risking instruments, but studies show that most are fragmented. They do not offer a complete set of tools for reducing uncertainty and fail to cover all stages of a renewable energy project life cycle. Innovative instruments such as renewAfrica, which aims to provide end-to-end de-risking, will make a big difference. RenewAfrica uses a one-stop-shop model to deliver end-to-end support, including technical assistance and financial support, as well as policy help and advocacy. Products like the Green 4 Access first-loss debt facility and policy and regulatory reforms to address investor risks will also help.
- **Financing projects that stimulate demand for clean energy:** Investments in the energy sector have been directed mostly to electricity supply. But there is little focus on generating demand, making electricity in rural areas largely unaffordable. For example, financing to farms for solar-powered irrigation would help increase productivity, enhance food security, and reduce the sector's vulnerability to climate change. Similarly, support for investment in reliable and affordable energy for production industries along the agricultural value chain can mean more rural

Funding shortfall

The financing available for electricity in sub-Saharan Africa pales in comparison to the need.



Source: Sustainable Energy for All and Climate Policy Initiative. 2020. "Energizing Finance: Understanding the Landscape." Vienna.

jobs, higher income for farmers, and less food waste. Affordable financing coupled with technical assistance—particularly in the estimation of sectors' energy demand—will help promote the uptake of clean energy. Mapping out such opportunities, complete with data on energy requirements, will help investors identify areas for financing. This requires a shift in planning methods. Policymakers and development partners must take an integrated approach to planning, which will help break down silos between sectors. Commercial banks should develop financing packages that target such opportunities.

- Modernizing Africa's power infrastructure to support reliability, flexibility, and sustainability:** A reliable and strong power system with the flexibility to integrate variable renewable energy is key to attracting much-needed investment in Africa's clean energy transition. Modernizing the electricity grid to improve its efficiency and flexibility is essential, along with enhanced sustainability and power system readiness. As such, the role of power utilities in the transformation is key. Helping power companies overcome the numerous challenges that keep them from attracting investment is therefore critical. Interventions that assist utilities with development and implementation of new

business models for integrated energy service and identify viable opportunities for commercial partnerships with other energy service stakeholders will address market-related bottlenecks. Lower-cost access and solutions to traditional utility challenges of efficiency, revenue recovery, and losses will be the outgrowth of such efforts. Addressing governance challenges that continue to face utilities can restore the confidence of potential investors. Commitments by national governments and development partners to deliver energy access to all is an opportunity for collaboration in this endeavor.

- Shifting investments away from fossil fuels and large hydroelectric power projects:** Most funding for new capacity in sub-Saharan Africa goes to large hydroelectric power projects, as well as fossil fuels, including natural gas and coal. The region's greenhouse gas emissions remain on average relatively low but achieving the goals of the Paris Agreement will require pursuing clean energy sources. And reduction of overreliance on hydropower, which is vulnerable to climate change, is essential to long-term energy security for the region. Bilateral partners, such as China, which is financing most of the hydropower and coal projects in the region, must shift away from these sources to non-hydroelectric renewable energy.
- Unlocking clean cooking solutions:** Financing for the clean cooking sector has increased, according to Sustainable Energy for All's 2020 report and the Clean Cooking Alliance 2021 industry snapshot. However, it is considerably less than what is needed to close the gap. Providing innovative mechanisms such as concessional and blended finance by development finance institutions will help catalyze private sector participation. Policy and regulatory reforms such as tax exemptions and reductions and de-risking investments will promote increased uptake of clean cooking technologies.

Reliable, abundant, and clean energy is key to a prosperous, sustainable, and inclusive economy. With a significant gap in access to energy and plenty of renewable energy resources, Africa is the last frontier for transformative investment in clean energy and climate action. **FD**

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