



ENERGIZING FINANCE
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ENERGIZING FINANCE:
**UNDERSTANDING
THE LANDSCAPE**

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EXECUTIVE SUMMARY

Despite significant advances over the last decade, electricity and clean cooking access continue to elude more than 789 million and 2.8¹ billion people, respectively, around the world. The COVID-19 pandemic has highlighted the severe implications that a lack of reliable energy access can have on healthcare systems, water and sanitation services, clean cooking, and communication and IT services. This has served as a wake-up call to accelerate action to achieve Sustainable Development Goal 7 (SDG7) — access to affordable, reliable, sustainable and modern energy for all — by 2030 to ensure that past progress is not reversed and that developing countries increase their resilience to future challenges.

The *Energizing Finance: Understanding the Landscape* report, developed by Sustainable Energy for All in partnership with Climate Policy Initiative and produced annually since 2017, provides a comprehensive analysis of commitments flowing to the two key areas of energy access: electrification and clean cooking. This fourth edition of the report tracks finance for electricity and clean cooking committed in 2018 to 20 Sub-Saharan African and Asian countries — known as the high-impact countries (HICs) — that together are home to more than 80 percent of people globally without energy access.

Year after year we continue to observe a widening cumulative gap between required and actual investment to achieve universal energy access in HICs, with finance not flowing to those most acutely in need. With less than a decade left to achieve universal energy access, we need to move far beyond a business-as-usual, incremental approach. This will require an unprecedented collaboration between donor and national governments, development finance institutions (DFIs) and private investors to align all financing for SDG7.

We need innovation in policies and regulatory frameworks, institutions and instruments, and business models to speed up efforts. National governments should commit to domestic policies that prioritize sustainable solutions to support green recovery while ensuring efficient use of limited public budgets. Donors and DFIs should deploy a wider range of instruments to manage, share and reduce risk, while working more closely with governments and the private sector to mobilize investment for energy access. It is especially crucial in the era of COVID-19, when public budgets and private investments are drying up, that donors fill the investment gaps rather than contribute to them.

While this report tracks the energy access financing landscape of 2018, its development has been influenced by the COVID-19 pandemic. The recommendations provided are intended to lay the foundations for long-term, green, resilient and inclusive growth. Many developing countries have achieved significant progress in recent years, and we must ensure that they continue to make similar advances despite current challenges.

For instance, previous reports highlighted India's rapid progress towards universal electrification, driven by its ambitious policy target of 175GW of renewable energy generation by 2022 and the resulting increase in private sector investment. However, in response to COVID-19, the Government of India has commenced the commercial auctioning of more than 41 coal mines, aimed at making India 'self-reliant' and attracting USD 4.4 billion in private sector investment (Hindu 2020). We must prevent these types of policy reversals if we are to realize a long-term, green, resilient and inclusive economic recovery after COVID-19.

¹ This number grows to an estimated 4 billion people without access to modern energy cooking services (MECS) i.e. those who have met the standards of tier 4 or higher across all six measurement attributes of the World Bank's Multi-Tier Framework (MTF) (ESMAP 2020a).

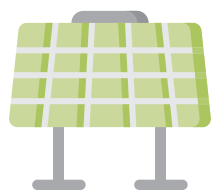
KEY MESSAGES: ELECTRICITY AND CLEAN COOKING FINANCING



Finance for energy access remains far below the investment needed to achieve SDG7 by 2030: USD 41 billion of annual investment is required to achieve universal residential electrification, but only one third, or USD 16 billion, was tracked in the HICs² in 2018. Finance for clean cooking tripled from USD 48 million in 2017 to USD 131 million in 2018 but remains substantially below the estimated annual USD 4.5³ billion required to achieve universal access by 2030. With only marginal year-on-year increases in commitments for energy, it is becoming increasingly clear that the financing community is failing to deliver on SDG7.



Investments are not going to the countries with the greatest need: In 2018, USD 3.3 billion of electricity access finance was committed to the 14 HICs in Sub-Saharan Africa (SSA) — less than 20 percent of total finance targeting residential access in the HICs — while SSA accounts for 70 percent of people in HICs without electricity access. The six HICs with the lowest electricity access rates, where more than 70 percent of the population does not have access to electricity — Burkina Faso, Chad, Congo (DR), Madagascar, Malawi and Niger — were all in the bottom half of the HICs in terms of finance for electricity committed. Similarly, for clean cooking, 18 countries (excluding Bangladesh and Kenya) that are home to over 2.2 billion people without access to clean cooking solutions attracted only 25 percent of the investment tracked. Countries like Congo (DR) and Ethiopia, where 95 percent of the population lacks access to clean cooking, attracted less than 1 percent of the annual investment they needed.



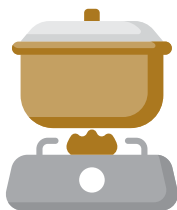
Investment is not flowing to the right energy solutions, which can jeopardize the attainment of other SDGs: Investment in fossil fuel generated electricity has increased, locking countries into decades of carbon emissions, import dependency and stranded asset risk. Fossil fuels accounted for the largest portion of electricity finance commitments to HICs for the first time in at least six years, driven largely by grid-connected fossil fuel projects in Bangladesh. Meanwhile, financing for grid-connected renewables declined for the first time since 2013. Also, finance for mini-grids and off-grid solutions remained at less than 1-1.5 percent of the total finance tracked for electricity. This limited volume of investment is unacceptable in light of the collateral damage: issues of gender equality, economic opportunity, climate change, and protection of land and forests are all suffering from this inertia.

² The previous three editions of this report tracked only the top 20 energy-deficient countries taken from the Global Tracking Framework 2015 (IEA and the World Bank 2015). Due to the changes in the HICs in this edition, the report now tracks 20 electricity-deficient countries with two new additions: Chad and Pakistan. Afghanistan and the Philippines are no longer tracked because of their recent progress in electricity access. For clean cooking, apart from the old HICs, the report also tracks Ghana, while Nepal is no longer tracked.

³ This number is estimated at USD 9.8 billion per annum to achieve modern clean cooking access, which corresponds to achieving at least tier 2 access (ESMAP 2020a). In contrast to the stated IEA required investment numbers, the ESMAP figure also includes public actors' expenditure such as that for fuel subsidies, which is not tracked in the report.



The overall energy access investment portfolio continues to be dominated by a few large projects and a handful of capital providers: This is particularly true of clean cooking investment, as it is dominated by public funding originating from a small number of institutions. For instance, Bangladesh alone accounted for 47 percent of total tracked clean cooking investment, arising mainly from two large projects financed by the World Bank Group and the Green Climate Fund.



Private sector investment remain elusive in the clean cooking sector: Private finance commitments increased only marginally to USD 32 million in 2018, from USD 21 million in 2017. However, unlike public finance that focuses mainly on improved cookstoves (ICS), private sector finance flowed to a range of modern or renewable fuels, such as ethanol, biogas and LPG. The overall lack of investment can be attributed to limited public finance to alleviate risk for private sector investors and to stimulate consumer demand.

RECOMMENDATIONS

Coordinated action from DFIs and donor governments is needed in SSA. Year after year, countries, particularly in SSA, receive low or zero energy access finance from donor governments and DFIs. These countries also face significant governance and sovereign credit challenges, limiting their ability to mobilize private finance. It is critical for donor governments and DFIs to: (1) systematically expand their energy access investment portfolios in these economies by incorporating co-benefits and interlinkages of these investments to meet several SDGs simultaneously; (2) scale up support through risk mitigation instruments and processes, including currency risk management solutions, guarantees and project preparation support, to alleviate risk and mobilize private sector investment; and (3) move from the current lumpy and unstructured financing of single energy projects to a more holistic approach to financing energy access at country level, grounded in efficient, modern and sustainable energy solutions.

Investment in renewable energy and transmission and distribution infrastructure should be accelerated to achieve energy access while maximizing synergies with the SDGs. Renewable energy investments offer three key benefits: (1) progress towards a number of SDGs, including climate action and improved health and living conditions in poor societies; (2) they contribute to green economic recovery and

long-term economic and social relief; and (3) they move countries towards achieving their Nationally Determined Contributions (NDCs).

Financing of fossil fuel projects as a means of closing the energy access gap should be terminated. A large portion of finance tracked in this report supported fossil fuel projects, mostly heavily polluting coal power plants. Countries like China — whose majority of international financing was directed to fossil fuel projects — need to align their international financing activities with their domestic narratives. China's recent commitment to national carbon neutrality before 2060 (NYT 2020) and an emissions peak in the next decade are critical steps, which should also be reflected in its international policy, replacing financing for fossil fuel projects overseas with strong support for renewable energy projects. Also, India's pursuit of a fossil-fuel based economic recovery post COVID-19 could be counterproductive in the long run, with severe health and economic implications (Livemint 2020).

Policy reform and the adoption of sustainable and innovative business models and financial instruments are important to accelerate deployment of mini-grids and off-grid solutions. These investments face common barriers across the HICs analysed, such as unsupportive policies and regulatory environments, small investment ticket sizes, limited access to expansion

capital, de-risking instruments and local currency finance (CPI 2020). As seen in the Rwanda case study (Chapter 3), clear policies for mini-grid developers, which include licensing requirements, tariff regulations, provisions for grid arrival and risk mitigation facilities, have increased private sector participation in Rwanda's electricity sector.

National governments are instrumental in expanding clean cooking access through targeted subsidies and policy support. Countries like India and Indonesia have shown rapid progress in access as a result of ambitious domestic programmes, especially for urban populations. Clean cooking access in Indonesia increased from 41 percent in 2016 to 80 percent in 2018, with levels of 91 percent for urban and 68 percent for rural access, mainly supported by a government-led kerosene-to-LPG fuel conversion programme. There is a pressing need for governments to: (1) design and implement cost-effective, sustainable and cross-ministerial programmes targeting vulnerable populations; (2) remove barriers that prevent small and medium-size enterprises (SMEs) and other innovators from accessing finance; (3) provide strong enabling environments by phasing out subsidies for polluting fuels like kerosene and removing taxes on clean cooking stoves and technologies; and (4) promote market

transformation strategies with coordinated commitments from multiple donors and national governments.

There is an urgent need to expand innovative clean cooking business models and financing mechanisms to a larger group of technologies. ICS are dominating the clean cooking investment market while investments in more innovative solutions like ethanol, solar and electric cooking remain sluggish. It is important to adapt and scale those models that have successfully supported emerging technologies in countries around the world to new contexts, ensuring that public finance is used in similar ways to de-risk private sector investment in nascent technologies and fuels. Carbon offset mechanisms, for instance, could be instrumental to move the needle for energy access investments, provided that negotiations around Article 6 of the Paris Agreement conclude successfully.

In addition to capturing finance commitments for energy access, *Energizing Finance: Understanding the Landscape 2020* provides deep-dive analyses of Rwanda and Bangladesh and proposes a framework to improve the accuracy and consistency of reporting finance for projects with gender equality objectives.



IMPACT OF POLICIES ON ELECTRICITY FINANCING IN RWANDA⁴

With smart policy choices, Rwanda has witnessed a significant transformation of its energy sector in recent years. It managed to attract additional financial resources and improve its energy access situation, increasing access from 10 percent of the population in 2010 to 35 percent in 2018.

Rwanda was one of the top three fast movers globally in electricity access between 2010 and 2017, scoring higher than the average of other low-income SSA countries in 20 out of 28 indicators captured in the World Bank's Regulatory Indicators for Sustainable Energy (RISE) index.

Expansion of the national electrification plan to encompass

off-grid solutions, implementation of a cost-reflective tariff structure while ensuring electricity is affordable to poor households, and restructuring its key energy sector agencies were instrumental changes that Rwanda enacted in the period 2013-2016 and that mobilized public and private investment to levels that were three to five times higher than those of other low-income countries in SSA.

Despite this substantial progress, this report identifies other areas where improvement and action are possible, such as prioritizing energy efficiency, mainstreaming gender considerations into all policies and programmes, and including informally-settled people in electrification plans to provide an integrated approach to electricity access and the energy sector.

CLEAN COOKING IN BANGLADESH

Bangladesh was the global hotspot for clean cooking financing in 2018, accounting for 47 percent of total investment and 78 percent of all public finance tracked. Finance commitments were dominated by a few large projects targeting access through ICS, biogas digestors and LPG. Despite several public sector led programmes over the last years, the percentage of people with access to clean cooking in Bangladesh increased only marginally, with more than 130 million people still without access to clean cooking alternatives in both rural and urban areas. Affordability issues, lack of awareness of health benefits and alternative technologies, and other socio-cultural reasons continue to limit the spread of clean cooking solutions.

With Bangladesh currently working on its revised National Action Plan for Clean Cooking, there is a clear need to provide more incentives for the private sector to invest in alternative technologies and fuels, such as ethanol, pellet-based ICS and biogas. Also, there is potential to explore adoption and scale-up of digital innovations across the clean cooking value chain, including innovative business and financing models to reduce distribution costs and increase affordability. Even traditional financing mechanisms, such as microfinance, a relatively mature finance sub-sector in Bangladesh, do not have many scaled examples of lending for ICS purchases.

⁴ Rwanda is not one of the 20 HICs tracked in the current edition of the report.



FINANCE FOR GENDER-FOCUSED ENERGY ACCESS

Finance for energy access with a specific gender focus has increased over the last decade, but it remains a small share (2–11 percent) of total official development assistance (ODA) in the energy sector, and it is highly concentrated amongst a few donors – 93 percent of total finance reported is from only 10 agencies.

Interviews with experts suggested that there is a lack of clear guidance and definition for how the concept of “gender equality” should be applied to the energy sector. Also, data aggregators have limited capacity to independently verify information from reporting institutions, which has led to inconsistencies in reporting projects’ gender outcomes.

To move towards resolving those inconsistencies, this report proposes a novel three-step methodology that project implementers can adopt to enhance the tracking of finance to energy access projects with a gender equality objective: (1) set out the context of gender inequality in the sub-sector and region where the project will be implemented, referencing types of inequalities; (2) establish and state the project’s intent to address the identified gender inequality; and (3) demonstrate a direct link and/or outcome between the identified gender inequality context and the financed activities. It is critical that donors direct sufficient financial resources and human expertise to ensure project managers and other project personnel have the capacity to accurately report against gender equality markers.

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