POLICY BRIEF
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Facilitating International Climate Finance Flows to Kenya's Decentralised Renewable Energy Sector

Globally, more than a billion people do not have access to affordable and clean energy. In Africa, 70% of its population still does not have access to modern energy services that are efficient and reliable. Specifically, more than 620 million people in sub-Saharan Africa live without electricity, and nearly 730 million people rely on inefficient and unsafe forms of cooking. On its part, Kenya is still largely considered as energy poor. Even though access to modern energy services in this country has improved over the years, the predominant fuels for lighting and cooking are the polluting kerosene and firewood respectively. Recent years have witnessed increased investment in energy sector, including in Africa. However, to attain the UN's universal access to sustainable energy, increased funding will still be needed, especially directed to clean, sustainable and decentralized energy systems targeting rural areas that are far off the national grid. Unfortunately, current rates of investment for energy access, especially in decentralised renewable energy (DRE) systems remain low. International financing mechanisms including International Climate Finance (ICF) can and should play a critical role in filling this gap. National governments will also need to prioritize DRE and develop strategies that can attract global funding into the sector if the ambition is to be realised..

Kenya's Energy Policy Context

Over the last five years, the energy system in Kenya has undergone significant transformation. Policy and legislative reforms have been undertaken with the aim of attracting investment to the country's energy sector in order to promote access for all. The Ministry of Energy and Petroleum (MoEP) is currently in the process of finalizing with the Energy Bill (2015), aimed at consolidating laws relating to energy; providing for national and county government functions in relation to the sector; as well as promotion of RE amongst others. At the same time, over the last year, MoEP has been working on a policy proposal to facilitate the country's switch from Feed-in-Tariffs (FiT) to auction schemes – a competitive based approach for Power Purchase Agreement , a move towards making the sector more attractive to investors. As a result of these reforms, the country has been touted as one of the most progressive in the region. Indeed, in 2016 alone, more than 1.3 million new connections were made, raising the percentage of those connected to electricity to over 70%, with MoEP targeting to achieve universal access by 2020 . Innovative business models such as Pay-As-You-Go have been utilised by private sector players such as M-Kopa, playing a critical role in promoting access to energy by the poor and far-off-the grid populations. Additionally, MoEP, with support from the World Bank (WB) (Sep 2017) launched a 150 million-dollar five-year energy access programme dubbed Kenya Off-grid Solar Access Programme aimed at enabling majority of the residents in the arid and semi-arid areas to have access to electricity.

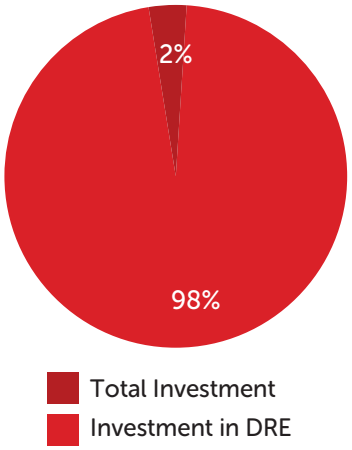
However, beyond policies and strategies, accessibility of finance is a fundamental driver of advancement towards realizing access to energy and clean cooking. As access to energy is a right to every Kenyan deliberate measures will need to be put in place by both policy makers as well as development partners, especially aiming at the un-targeted 5%, who come from the most remote part of the country to provide them with access to energy. It is clear that the only way to get electricity access to this population in the immediate term will be to set up local scale, decentralised energy systems. Targeted approaches will need to be developed and deployed if this population is to benefit from energy access. In practical terms, deployment of DRE remains one of the most feasible, as well as the cheapest and fastest solutions to promoting energy access to these locations. In fact, decentralised mini-grids are seen as a way to improve grid reliability, by localising generation and reducing the risk of transmission faults. ICF would play the most critical role of unlocking finance for investment in this sector.

Status of Energy Investment in Kenya

This study examined the overall level of investment from development partners to Kenya's energy sector over a five-year period (2011 – 2015) and the proportion of funding that has gone towards the country's DRE sector. Additionally, it sought to investigate the share of total funding that came from ICF. The study revealed that over this period, development partners have invested heavily in Kenya's energy sector, compared to other countries in the East African region. Cumulatively, US$ 2,908.79 million was invested over this period, with varying annual amounts as captured in the Infographic. Year 2015 saw the biggest level of investment, perhaps due to success in the energy campaign that was initiated by the government to provide energy to every Kenyan. The African Development Bank (AfDB) has been leading in investing in the country's energy sector, followed by the WB and the French Development vPartners - AfD/Propaco with cumulative investments of US$ 796.2 million, US$ 625.5 million and US$ 504.72 million respectively.

The funds, however, are mostly seen to go to large-scale RE projects and grid expansion. For instance, geothermal sector received the largest share of the investments, with a cumulative amount of US$ 1,303.89 million over the five-year period, representing 44.83% of the total share of overall investment in the sector. Transmission and distribution followed with a collective investment of US$ 704.86 million, largely due to major focus of development partners in regional power inter-connections under the East-African Power Pull Programme, as well as the Rural Electrification Programme.

Comparison between total Investment & Investment in DRE



DRE

US$ 57.86 Million, representing a paltry 2% of the total investment in the energy sector went to DRE as compared to on-grid investment.

GIZ

Germany, through GIZ topped investment in DRE in Kenya with a total of US$ 41.6 million, representing 71.9% of the total investment by all the development partners in DRE over the period.

CFU

Climate Funds Update (CFU), none (0%) of the funds that came to Kenya's energy sector from the ICF was directed towards DRE. This is well reflected by AfDB's resource allocations to Kenya's sector.

AfDB

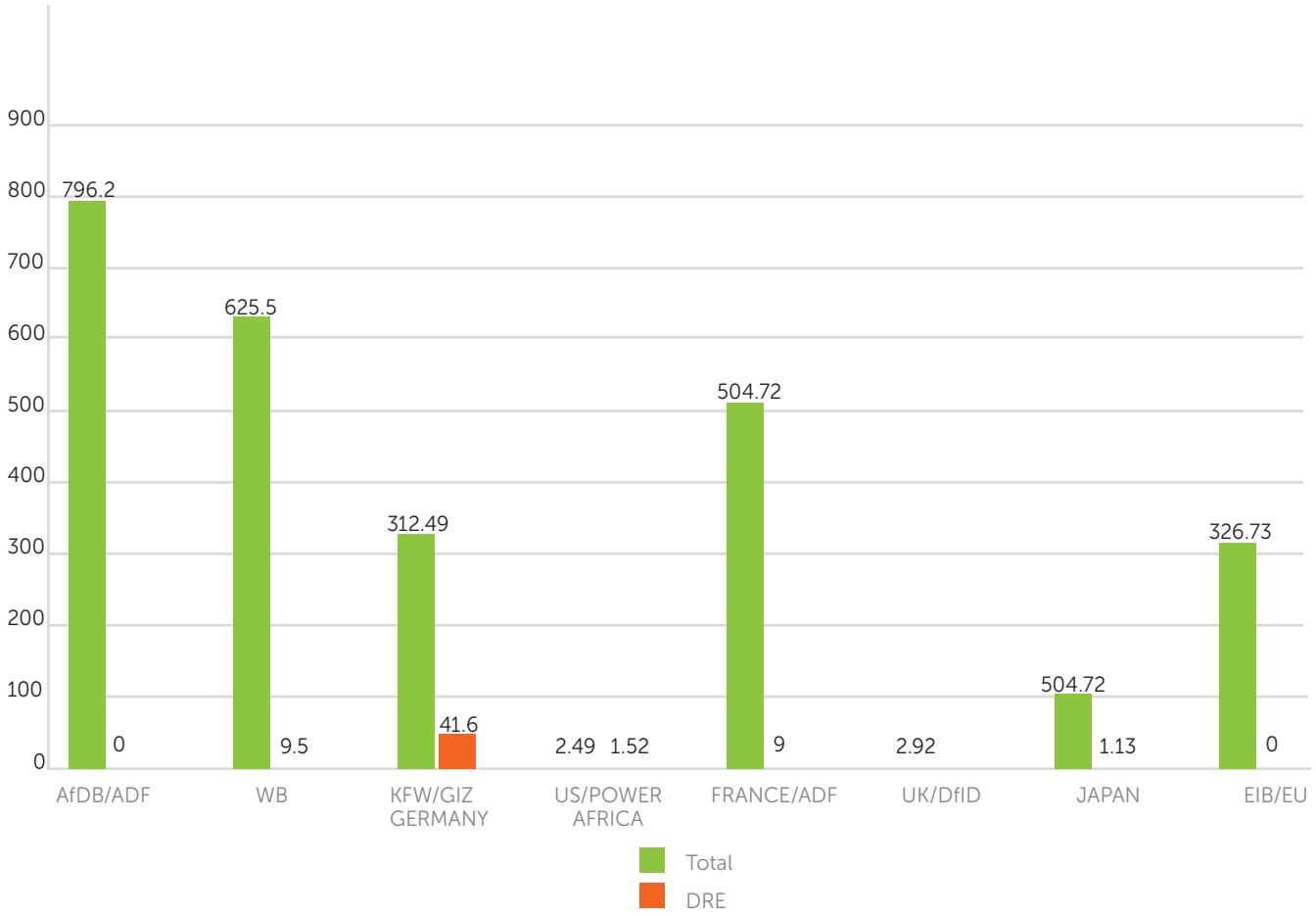
AfDB is managing the Climate Investment Funds, part of which was invested in Kenya's energy sector. No amount from the Bank's overall investment went to DRE.

WB

WB directed US$ 9.5 million out of the total of US$ 625.5 million, representing only 1.52% of its total investment in the country's energy sector.

There are a few obstacles hampering rollout of DRE projects in Kenya. The time taken between negotiating and actual signing of contractual agreement between governments emerged as potential bottleneck that has in some instances slowed implementation of some of the DRE programmes. This has sometimes led to delays in initiation of projects, potentially risking complete loss of the investment opportunities and thus delaying communities' access to energy.

Total Investments in Energy Sector and in DRE (Millions US$)



Policy Recommendations

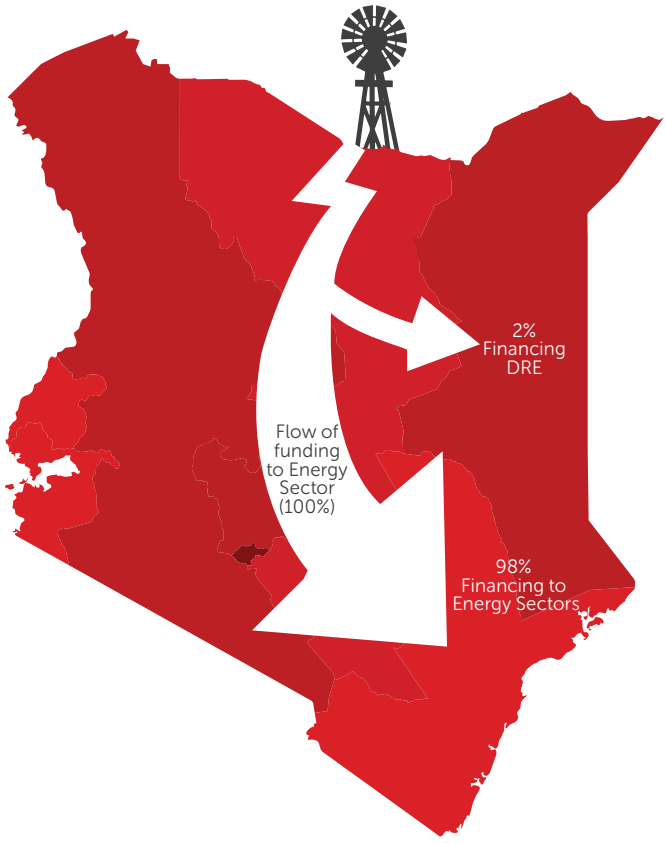
DRE technologies including mini-grids and stand-alone systems have evolved as cost-effective alternative to centralised solutions, particularly in under-served remote parts of developing countries like Kenya where energy access is non-existent due to the distance from the national grid . The distributed nature of these technologies allows them to be tailored to local circumstances and installed closer to where they are demanded by the populations. This has significant potential for minimizing or in some instances total elimination of the need for a centralised grid infrastructure. However, evidence from this study indicates that the investment in, as well as the rate of deployment of DRE technologies remain low. International Climate Finance should and must play a critical role in deployment of DRE in Kenya's rural areas. The Kenyan government needs to further create an enabling environment to attract more investment targeted to this sector. A few of the policy proposals based on the findings of this study include;

Use ICF resources to unlock funding potential for DRE sector – Kenya has continued to receive significant amount of international funding for the energy sector due to its favourable policies and legislations. Potential for increased funding remain as investors direct additional resources to identified projects. However, as the study reveals, only 2% of the total investment has gone to renewables, a reflection of the current global state in the flow of CF where only 3.4% of overall energy funding went to DRE sector . This is because, climate investors prefer concessional lending for large scale energy projects as opposed to decentralised projects. As indicated in a report by International Institute for Environment and Development, grants, especially from ICF sources could be used to kick-start DRE projects in order to generate initial local market, thereby attracting flow of private sector investment. Multi-lateral development banks such as AfDB and WB should step in to de-risk the sector by providing guarantees to the private investors interested in participating in DRE sector. The Ministry of Environment and Natural Resources (MENR) as well as MoEP should prioritize DRE and ask for funding for prioritised investment projects from ICF, particularly the Green Climate Fund (GCF). This will require close coordination between the two ministries (MoEP & MENR) and the National Treasury as the National Designated Authority (NDA) for the GCF which ultimately decides which priority projects should be submitted to the latter. On its part, GCF should ring-fence a proportion of its resources to go directly to DRE projects and encourage NDAs to submit proposals that specifically target those resources. This will have double benefits; (a) it will act as an incentive for both private sector players and NDAs to develop and submit proposals targeting specific DRE projects and (b) it will help to ensure that every community has access to clean and sustainable energy thus leaving no one behind.

Create an enabling environment for private sector participation – on grid RE projects such as geothermal have proven a lot easier to secure project finance from private investors using different innovative models and approaches. This is particularly due to their bankability nature where investors are more confident of their return on investment. On the other hand, investors perceive DRE to be risky. For instance, the low rate of electricity tariffs which has been as a result of the standard application of tariff rates by the Kenyan government for the Power Purchase Agreements have been blamed for lack of incentivizing private sector participation in DRE. DRE such as mini-grids requires many years of operation (between 13 – 20 years) for the investor to recoup their investment. Uncertainties such as what will happen when the grid arrives and the potential risk of having stranded assets thereafter have discouraged many investors. As such, to attract private investors, predictable policies will need to be developed and adopted in order to give investor confidence. The recent suspension of the current Feed-in-Tariffs systems and the consideration by the Energy Regulatory Commission to replace it with the competitive auction systems for renewables is seen as a move in the right direction. It is believed that auctions schemes will introduce the level playing field necessary for competitive prices of electricity hence attracting investors in the DRE.

Need for innovative investment models to promote energy for productive use – sustainability of the traditional models of energy provision (such as solar lanterns, solar lights etc) has increasingly come under attack as a challenge for workable models in the long-term. Providing energy for productive use linked to local entrepreneurship opportunities such as solar-powered irrigation for market-led interventions has proven to be more sustainable. From such approaches, community members can generate income from the entrepreneurship opportunities unlocked by the energy provided through the decentralized systems, thereafter affording to pay for the cost of energy provided. Innovative approaches and strategies such as result based financing models could help move the thinking towards that direction. Additionally, Kenyan civil society, private sector players as well as policy makers should borrow lessons from successful programmes with good results such as Energizing Development, as well as other innovative programmes implemented by companies such as SELCO in India and Schneider Electric amongst others. Indeed, with the recent rebasing of Kenya's economy into a lower-level middle income country, development partners will opt more towards private-sector-led models.

Sensitize CSOs and private sector on potential of DRE as well as ICF Opportunities – DREs have a significant opportunity in helping Kenya meet its Nationally Determined Commitments while at the same time energizing local communities. However, overall level of awareness, technical capacity and understanding of policy issues and opportunities surrounding DRE technologies remains very low amongst the public, CSOs and policy makers including government and multilateral development banks. Building this capacity will be critical in ensuring that the level of investment and subsequent uptake of DREs technologies is promoted. CSOs are better positioned since they work in those far off communities where DRE technologies are needed most. As such, the NDA, working closely with MoEP and MENR needs to build the capacity of CSOs to understand the requirements needed in meeting GCF criteria to access the funding. This will also enhance their understanding and knowledge to engage with, and influence policy makers at national as well as international level to allocate more resources from ICF to DRE sector. Additionally, close coordination between these actors i.e., NDA, MoEP, MENR and CSOs will be critical in order to prioritize identified high impact interventions in the sector for submission to GCF.



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