PWCET Series – 8th Event

Financing the Clean Energy Transition in Africa – Gaps & Opportunities
Introduction

Under the new joint initiative ‘Paving the way for Clean Energy Transition with Decentralised Renewable Energy (PWCET) Series’, the Alliance for Rural Electrification (ARE) and the Green People’s Energy (GBE) organised the eighth event titled “Financing the Clean Energy Transition in Africa – Gaps & Opportunities” on 8th February 2023. The webinar had 768 registrations and attracted more than 360 attendees, worldwide.

Event Summary

The webinar was opened by, Mr. David Lecoque, CEO, ARE who introduced ARE, the PWCET series and the topic of the webinar to the audience.

Ms. Gabriele Pammesberger, Access to Finance Specialist, ARE carried on with the proceedings of the session as the moderator.

Mrs. Bärbel Höhn, Special Representative for Energy in Africa, BMZ gave a keynote speech where she established the fact that the need for financing instruments for DRE still remains as a big question. She iterated that the global energy crisis was a wake up call to trigger further investments in renewables. However, this inflow of investment must be increased in order to achieve the energy access targets in the wake of crisis like COVID-19 and the ongoing Russia-Ukraine conflict. To put things in perspective, the latest Africa Energy Outlook report was quoted to present the fact that 4% more people in Africa lack access to energy in 2021 as compared to 2019. Only 4% people in Sub-Saharan Africa had access to enough energy in 2020. Thanks to the incoming investments in the sector, things are looking positive with a potential increase in the installations of renewable power infrastructures.

Mrs. Höhn further stressed that more efforts are necessary with the right kind of financial instruments if we aim to reach all the sustainable development goals (SDGs). She further identified that there are problems and obstacles in the adoption of renewables in the countries around the world. Proper and conducive regulatory measures are needed to address the issues. Public-private partnerships can be explored for strengthening the inflow of capital to the DRE projects in remote areas. She further highlighted the key elements like operation & maintenance, capacity building, bureaucracy, bolstering local market that needs investment to make the projects successful. Therefore, the GBE initiative recommends that the mix of grants, loans, private capital to empower the small and medium size entrepreneurs in the local market.

In conclusion Mrs. Höhn explained that longevity of the DRE infrastructures can be enhanced if the local people will be involved in the upkeep and operation.

The first speaker was Mr. Daniel Kitwa, Deputy Director for Energy Access Finance, GreenMax Capital Advisors. Mr. Kitwa began by introducing the newly established Clean Energy & Energy Inclusion (CEI) for Africa initiative by the Federal Ministry of Economic Cooperation and Development (BMZ), Germany through Kreditanstalt für Wiederaufbau (KFW). The consortium involved in this initiative are Triple Jump, Persistent, and GreenMax Capital Group. The objective here is to provide a holistic one-stop-shop model towards decentralised energy access through green mini-grids and standalone solar.

Mr. Kitwa introduced the two different branches of this initiative, one of which is a crowd-lending window where CEI Africa will jointly work with other crowdlending platforms to provide debt-financial support as well as direct investments. On the other branch, it focuses on the Result-based Financing (RBF) facility where CEI Africa will provide output-based grants and technical assistance to provide access to electricity to the end-user households. This process and monitoring is handled through the Odyssey’s platform.
The following speaker was Mr. Razvan Sandru, Project Manager, GBE Benin. Mr. Sandru introduced the work of GBE concretely in Benin. The main focus in Benin is productive use of energy and mini-grids. GBE Benin addresses the access to finance topic on two fronts: company level and end-customer level.

**Access to finance in decentralised renewable energy**

On a **company** level

On a **end-customer** level

*Source: [Image 1]: "Digital art of a black woman-owned solar company receiving funding from a female investor"*

*Source: [Image 2]: "Adobe pen and watercolor art of an African farmer receiving credit from a microfinance institution"*
The activities involve individual mentoring initiatives for solar companies, business development and management training as well as pitching and matchmaking. Based on these activities, Mr. Sandru also highlighted the challenges and opportunities. At the end-customer level, GBE Benin is building an ecosystem of actors by working with distributors and microfinance institutions. This is done through results-based financing (RBF) and technical assistance. Similarly, the risks and challenges were also discussed along with GBE’s intervention with a dedicated incentive structure.

The next speaker in line was Ms. Gracia Munganga, COO, SustainSolar. Ms. Munganga began with a brief introduction to her company SustainSolar which is a systems’ integrator providing modular turnkey, containerized off-grid solar and battery energy storage systems (BESS). She touched up on the mini-grid finance ecosystem by pointing out the fact that there remains a significant funding gap required to achieve SDG 7 despite the $1.8 bn committed to date.

Ms. Munganga noted that capital investment of $128 billion needed for mini-grid rollout goals in sub-Saharan Africa, Asia, and island nations (SEforALL 2020). This will require equity, debt, grant, and in-kind government, etc. support. Stating that, she further also highlighted some notable funding sources like:

- Mini-Grids Funders Group
- Private equity investors e.g. Gaia Impact Fund, All On
- Debt lenders e.g. SunFunder, Oikocredit, SIMA Funds
- In-kind infrastructure e.g. distribution grid by Umeme utility, etc.

Ms. Munganga also gave kudos to the strong effort to develop tailored funding instruments to support scale and speed of deployment required in the DRE sector. Followed by that, the experiences from the pilot projects in cooperation with Sustainsolar’s clients were discussed identifying the risks and challenges related to the financing.

The final speaker on this occasion was Mr. Kjetil Roine, CEO, Differ Community Power. Mr. Roine started with the fundamental questions on project financing such as: what to finance? Who can finance? And who pays in the end? He endeavoured to answer these questions based on his own experience at Differ Community Power.

The biggest challenge identified by Mr. Roine was the lack of sufficient funding options for operational expenditure (OpEx). Usually, in the end it is the customer who pays. However, the countries where Differ Community Power is operating at, the customers are not always able to pay, particularly for OpEx. Development organisations or grant funding mostly cover the upfront CapEx costs. Therefore, Mr. Roine suggested to ensure the bankability of the projects from the get-go. This will enhance the faith of the financiers to put funding for the projects. Differ Community Power is doing the same in
Mr. Roine pointed out the below five points to make projects bankable.

- Creditworthy customer/counterpart
- Guarantees for non-payment
- First loss facility
- Results Based Financing (helping the customer)
- Mitigation of FX risk

Lastly in conclusion, it is also quite important to have clarity on who is financing the projects and the risk of non-payments is manageable so that return of investments for the financiers can be ensured.

Ms. Pammesberger thanked the speakers for their presentations and facilitated the panel discussion with questions from the audience. Some notable questions are highlighted below:

**Question 1 (Q1):** Investments in renewables are increasing but 90% of funding are going to foreign-owned companies. Why are not the local businesses funded? Why there is this huge inequality in the renewable energy financing?

**Mrs. Bärbel Höhn:** “We see that very often the capital is coming from developed nations. Keeping that in mind, the GBE programme (along with GIZ, SAE Africa, KFW) decided to strengthen the local market. GBE programme strives to support the companies in the local markets to create employment and enhance income generation for the locals. The local companies can take the responsibility of operating the DRE projects ensuring steady income for them and sustainability of the projects.”

**Mr. Kjetil Roine** added “Differ Community Power works in Malawi and there the local companies face the challenge to pay for the hardware in USD (foreign currency) due to country’s regulation. That is a challenge that local companies face, and the Western companies don’t. With regards to the operations, in order to scale up, remote operations are essential. Lastly, the European companies cooperate with the local companies for installations, logistics and other things which generate economic activities for the locals.”

**Mr. Razvan Sandru** agreed that the inequality is an issue in Africa. He added “it is a bit similar to access to finance for women. Microfinance institutions tell us that male entrepreneurs go for larger loans which are easy to process as compared to the smaller ticket size loan request from women entrepreneurs. So, in a nutshell, the finance is more accessible which the ticket size is fairly larger. Secondly, it is also a matter of speaking the language of the financiers. People in Europe/Western companies have more access to such resources and expertise on applying for funding with which they are able to tap into investments while local companies lack these capabilities. There are also hurdles like bureaucracies, ESG requirements and passing through the due diligence which the Western companies can go through easily compared to the local companies lacking lack of knowhow and reseources. Lastly, it is also true that local companies are facing the biased treatments, racism etc. which go against their cases”.

**Mr. Daniel Kitwa** also added the perspective of CEI Africa on this matter by saying “it all depends on the design of the fund. In one aspect, we encourage applications with joint ventures from foreign and local businesses. This presents the local companies to also be at the receiving end of such investments. Other aspect is technical assistance. We are offering it to the companies to build their capacity and get them to a position where are capable of attracting project financing”.

**Question 2 (Q2):** What are the financing models for the local production of solar PV and container-based solutions locally in sub-Saharan Africa in the long term?
Ms. Gracia Munganga: “SustainSolar is not an OEM and we don’t produce our own components. Instead, we integrate different components into a turnkey solution. What we bring to the table is the engineering know-how, the time saving of the installations on site and O&M which is key to the success of any DRE project. Now, the local manufacturing in South Africa is a big issue because the OEMs need scale in order to keep the prices of the parts competitive. In overall African market, there are also issues with the logistics of moving the equipment around. SustainSolar has addressed these issues by identifying the right components, found the right logistics channels and focus on remote monitoring to handle the operations. Lastly, the discussion with the sector is as these instruments are being put in place, there is a need to structure the funding in a way that OEM remains as an integral part of the success of the programme.”

Q3: Are there any financing windows available for community-owned green electric cooperatives in Africa? Do these windows cover both CapEx and OpEx? What is the typical ticket size?

Mr. Daniel Kitwa: “In terms of ticket size, we are looking to work with a portfolios of one project site with minimum 1000 connections. For example, for the current window we run in Kenya, we are giving the developers an incentive of USD 500 per connection. When it comes to the nature or structure of the entities we support, we are looking at the for-profit business models for mini-grids. Lastly, in terms of the structure of the funding, our traditional results based financing (RBF) window is CapEx based covering the generation and distribution assets spread over the no.of connections. This funding comes after the milestones have been unlocked by the developer. Furthermore, with the Crowdlending window, there is a need to pre-finance all the operations that get to the construction. For the smart outcomes component, a portion of this financing comes upon the connection of productive use of energy (PUE) assets. The other incentive is targeted over 6 to 18 months period depending on the outcomes of the projects. So, in that sense, maybe indirectly that kind of funding could support a portion of operational expenses of the project”.

To conclude the webinar, Ms. Dorothea Otremba, Senior Advisor, GIZ thanked all the panellists for their contributions and the audience for their active participation. She also suggested the audience to follow ARE and GBE webpages to be updated on the latest information on the topic.
Annex: Webinar Programme

<table>
<thead>
<tr>
<th>Programme 90 Minutes</th>
<th>Opening and welcome remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. David Lecoque, CEO, ARE</td>
<td></td>
</tr>
</tbody>
</table>

**Moderator**
Ms. Gabriele Pammesberger, Access to Finance Specialist, ARE

**Keynote speech**
Mrs. Bärbel Höhn, Special Representative for Energy in Africa, BMZ

**Speaker interventions and dialogue**
- Mr. Daniel Kitwa, Deputy Director Energy Access Finance, GreenMax
- Mr. Razvan Sandru, Project Manager, GBE Benin
- Ms. Gracia Munganga, COO, SustainSolar
- Mr. Kjetil Roine, CEO, Differ Community Power

**Closing remarks**
Ms. Dorothea Ottremba, Senior Advisor, GIZ

**Partners:**

**About GBE**
Dr. Gerd Müller, the Federal Minister for Economic Cooperation and Development, announced a new initiative, named Green People’s Energy for Africa (GBE) in June 2017. This initiative aims to enable, expand and secure the supply of sustainable energy in rural Africa. It is part of the Marshall Plan with Africa and relies on the broad participation of small and medium-sized enterprises, municipalities, cooperatives, public associations and citizens.

**Contact:** Dorothea Ottremba ([dorothea.otremba@giz.de](mailto:dorothea.otremba@giz.de)), Senior Advisor, GIZ

**About ARE**
Established in 2006, the Alliance for Rural Electrification (ARE) is the global association for the decentralised renewable energy industry, catalysing private sector driven markets for sustainable electricity services, creating jobs and powering equitable green economies.

**Contact:** Deepak Mohapatra ([d.mohapatra@ruralelec.org](mailto:d.mohapatra@ruralelec.org)), Senior Officer - Business & Market Development, ARE