

by Michael Sakala

Africa's Quest for Sustainable Development Goal (SDG7)

Introduction

Sustainable Development Goal 7 (SDG 7) calls for sustainable energy access for all. These goals are critical for sustainable development in Africa. Insufficient energy supply or provision remains a major impediment throughout the continent. Building an energy system for Africa that meets the continent's growing energy demands is a multifaceted challenge. It includes addressing energy poverty increasingly concentrated in rural areas, shifting energy demand away from biomass, and accelerating regulatory reform. An overarching challenge is the lack of sufficient investment in energy.

Lately, COVID-19 pandemic has added to the challenge by dismantling steady progress made in recent years to increase access to affordable, reliable, sustainable and modern energy - an objective enshrined in the SDG 7. Due to the COVID-19 pandemic, the health crisis has forced governments to shift their immediate priorities to purely emergency measures, resulting in a lack of financing available for expanding and improving electricity infrastructure. Furthermore, private companies deploying decentralized energy solutions like solar home systems and mini-grids have faced operational and financial challenges because of the pandemic to accelerate access to the rural population.

The lack of access to clean cooking energy remains very acute in sub-Saharan Africa with access increasing only slightly from 15% in 2015 to 17% in 2018. Since 2015, only 25 million people had gained access to clean cooking energy in the region making Sub-Saharan Africa

the only region where the number of those without access continues to rise significantly, highlighting the urgent need for action. Despite accelerated progress in recent years, the SDG target of universal access by 2030 appears unlikely to be met, leaving an estimated more than 660 million people without electricity.

The reliance on gathering biomass for cooking, in particular in rural areas, has been contributing to 600,000 premature deaths per year, related to household air pollution from the lack of access to clean cooking facilities, with women and children the worst affected. Forest deforestation is leading to land degradation, which is another serious consequence of the unsustainable harvesting of wood fuel, twice as high as the rest of the world.

Although Africa has abundant Renewable Energy (RE) sources, mainly Solar, Wind and Geothermal, etc., challenges still remain before full RE potential is achieved.







Fig. 4

Wind Nuclear Other Coal Solar Biomass/biogas Natural gas & liquid fuels Hydroelectricity Geothermal 5,000 Liquid fuels Natural gas MW 4,000 Fig. 4: Sub-Saharan Africa Net On and Off Grid Fuel 3,000 Added from 2011-2021 2,000 1,000

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Challenges of Climate Change

Africa's water and energy security is critically endangered due to climate change disruptions exacerbated by increasing human encroachment of water bodies, carbon emissions and unsustainable land use activities. The impacts of climate change are floods, droughts, wildfires, among others, being experienced in extremes. Africa's energy sector is heavily reliant on non-renewables such as coal, oil, natural gas etc. as in figure 3 above. However, non-renewables contribute to carbon emissions and the eventual global warming, and dammed water levels for hydropower have in the previous decades hit record low capacity due to climate induced poor rains. As a result, power deficits are impacting negatively on the African Countries' economies and local livelihoods. This development has potentially far reaching social and economic effects on the lives and operations of poor urban residents and small scale business enterprises (SMEs) that routinely depend on stable access to electricity.

In order to achieve universal access to modern energy services, significant improvements in the enabling environments for relevant projects and programs must be created. There is a need for most African countries to increase their intention to improve their energy policies with a view of increasing energy access to millions of their citizens. However, their intentions to increase Energy Access (EA) through clean and affordable RE at the expense of fossil fuels has not been ambitious enough as Sub-Saharan Africa has one of the lowest average annual improvement rates in energy intensity at just 1.4%, well below the global average of 2.0% in 2019 and the 3.0% needed to achieve the SDG7 target. Electricity access rate was just 46%: with an increase from 548 million people in 2018 to 570 million people who still lacked access to electricity.¹⁰

From figure 4, a net of 2,689MW on-grid capacity was added overall in quarter one of 2021 – gas accounted for 1,397MW, followed by coal (800MW), liquid fuels (668MW), hydropower (244MW) and solar (231MW).

Africa must drastically increase investment in climate adaptation, especially Nature-based Solutions (NbS), to build more resilient societies, economies and ecosystems. Investing in sustainable adaptation solutions can help Africa, together with the whole world, to tackle our twin global crises: climate change and nature loss.

The main areas Africa should drive change through is with increasing access for:

- a. Electricity through more focus on RE
- b. Clean Cooking energy
- c. Energy Efficiency

To upscale energy access (EA) through renewable energy solutions in Africa, we need to catalyse processes under 3 pillars:

- a. Good governance to promote an enabling environment for private sector engagement. There is more need to support RE friendly policies & regulatory frameworks
- b. Access to affordable finance for both entrepreneurs and end users. Increasing capital flows to SMEs working with RE access
- c. **Opening markets and developing entrepreneurship skills** so that SMEs can lead and steer the development of energy transition value chains in Africa. There is also a huge requirement to enhance RE entrepreneurship skills and open up markets.

Further, the role of the private sector in accelerating RE transition is important. The private sector can be effectively engaged if national governments create and maintain vibrant enabling environments for RE trade.

There is need to elaborate the gaps in operational environment(s) mainly:

- a. **Regulatory frameworks** reforms are needed to strengthen governance of nascent energy markets, ensure transparency and protection of contracts and property rights, and to open up investment opportunities for global public and private investment.
- b. **National energy policies** so they promote divestment from sustainable sources of energy to renewable energy.

Africa needs to promote National & Regional partnerships using the Triple C Approach that is through Coordination, Cooperation, and Capacity building. This will lead to harmonization of stakeholders, sharing best practices, complementing each other, joint marketing and bulk production, and strong Civil Society Organizations (CSOs) and value chain players.

In summary, the following will help accelerate Africa's quest for Sustainable Development Goal (SDG7) through creating:

- a. Friendly environment for RE private sector through:
 - Policies that are pro EA and RE.
 - Regulatory frameworks that promote RE businesses.
 - Reduced costs of RE solutions through joint marketing and bulk production.
- b. Regulated value chain for charcoal and other sustainable cooking alternatives through:
 - Greening (regulations for sustainable production and use).
 - Standardization, testing & quality assurance of cooking stoves.

- Promotion of sustainable non-charcoal cooking alternatives.
- c. Increase in RE capital financing to:
 - Encourage banks to roll out affordable financial instruments
- d. Strengthened capacities of RE players to:
 - Access financial/technical support for upscaling.
 - Market jointly and produce in bulk.
- e. Strengthened CSOs for:
 - Effective in public awareness, advocacy and monitoring of EA and RE.

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