



Report of the workshop on Energy Efficiency and Accessibility in Africa

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Coalition for Energy Efficiency and Accessibility in Africa

ENGIE, CAN Tanzania, GERES, ICLEI Africa, REFACC, Schneider Electric, World Future Council

Africa has experienced rapid economic growth, which was followed by increase in energy demand. This growing energy need has become one of the top priorities of African policymakers, as it responds to the high demand for electricity while ensuring access to energy for all and stimulates economic development.

Indeed, in about 30 countries in Africa, repeated power cuts are a challenge for nearly 600 million Africans do not have reliable access to electricity. On the other hand, an energy deficit has significantly slowed Africa's economic development down, as about 70% of the sub-Saharan population is living without a reliable source of electricity. According to the African Development Bank (AfDB), industrial sector enterprises in Sub-Saharan Africa have had an average of 56 days of shutdown per year due to power cuts.

It is estimated that Sub-Saharan African countries are in need of more than \$30 billion investments to ensure access to electricity by 2030 and the majority of these funds should be allocated to rural areas where more than 85% of the population lives without access to electricity.

In addition, for Africa, the Paris Agreement is of particular importance because, as on one hand, Africa is the most affected continent by climate change (7 out of 10 of the most threatened countries according to a report by the African Development Bank are in Africa), and on the other hand it has enormous potential in renewable energy production. Indeed, even if the continent emits only 4% of the world's greenhouse gases, Africa can contribute to achieving the long-term Sustainable Development Goals, notably in terms of mitigation through its renewable energy potential.

Recognizing this opportunity and these challenges, some regional organizations such as ECOWAS have already developed agendas for access to renewable energy resources.

Successful implementation of the National Determined Contributions (NDCs) is central to the success of the Paris Agreement. The latter is based on two long-term objectives:



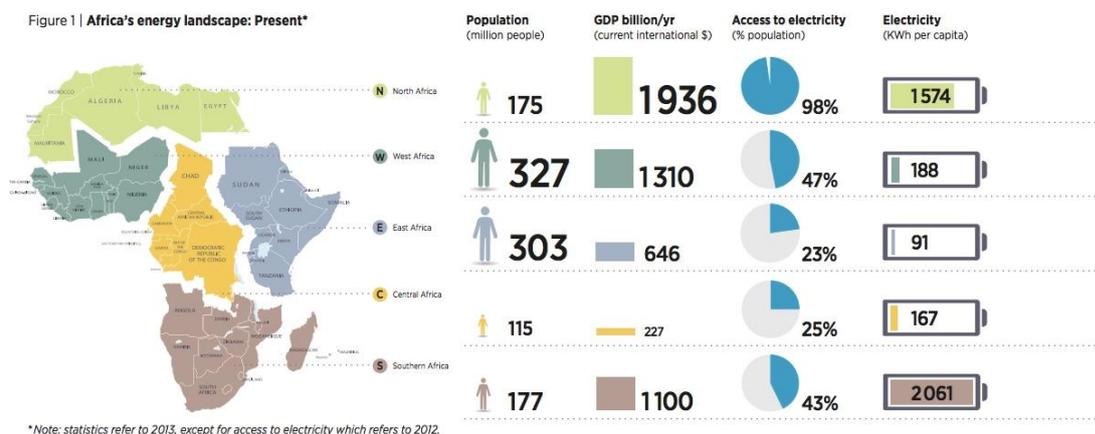
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1. Mitigation: Keep the global temperature below 2 degrees Celsius and maintain efforts to limit the temperature increase beyond 1.5 degrees.
2. Adaptation: increasing adaptive capacities, building resilience and reducing vulnerability to climate change, while maintaining the perspective of contributing to sustainable development.

I – WHERE ARE WE?

a) Overview of energy map on the African continent.

Rapport IRENA : Africa 2030 : Roadmap for a Renewable Energy Future



For the time being, the African continent's energy needs are essentially dependent on a mix of biomass and fossil fuels. Biomass energy accounts for about half of Africa's total primary energy.

b) Diagnostic

Africa does not have the means to develop large electricity grids, especially since national policies have created too many administrative and technical barriers to the adoption of new technologies. It is therefore essential to think about the most cost-effective way to access them, such as mini grids and solar kits. We can therefore see that solar energy has become an important part of daily life, especially thanks to the use of lamps, which for the moment make it possible to manage a reliable and environmentally friendly source of lighting. On the other hand, cooking in the home accounts for 80% of the energy consumption, which remains a central issue on the continent and is not very well considered in the discussions on the energy issue.

c) Acquirement of new technologies by local actors

It is important to decentralize and liberalize the energy sector in a way that increases capability of local authorities to meet the energy demand created by urban and rural populations, as well as to create incentives for private entities' and youth' engagement.

d) Financement of the activity: the existing ones.

The acute need for energy access encourages companies to provide solutions and donors to announce the willingness to facilitate this access. However, it is important to clarify the proposals for financing as well as the power available.



II – WE DO WE WANT TO GO?

At the end of the first part of the workshop dedicated to the current state of affairs, potential activities for the coalition were proposed and discussed; it is essentially a question of enabling synergies.

THE ROLE OF PUBLIC POLICIES

There is a general reluctance of the governments to provide greater access to energy, while the private sector and NGOs are actively working with local populations. For example, AKON Lighting for Africa, an NGO created in 2014, has launched an electrification project based on solar technology, which aims to provide access to energy for several million households in 40 African countries by 2020.

On the other hand, ENGIE continues to promote decentralised energy and prioritise the supply and use of off-grid renewable energy in Africa, using solar home installations and mini-grids. These activities are in line with ENGIE's objectives to give more than one million people in Africa access to low-carbon and decentralised energy by 2020.

In fact, moving from planning to concrete projects is a multifaceted challenge in Africa. The guidelines are often well done, but the transition to the implementation of these projects seems to be much more difficult, even if they are well funded.

It is therefore essential to structure the State's relationship with local elected officials and to better take charge of climate and energy issues. The purpose of local action planning will be to raise awareness and provide information to municipalities on energy supplies, which remain highly centralized at the state level for the time being. On the other hand, a legal framework should enable the encouragement of innovative solutions at national level and develop an awareness of the importance of innovations by local authorities. By doing so, it would promote an exchange of best practices and examples between local authorities and thus contribute to collaborative management.

Strategic reflection on climate must therefore redefine the place and role of territories as a pivotal factor, as a place of collective awareness, mobilization and creative action. However, various constraints hinder the process of decentralization and accountability of sub-national levels. Achieving this challenge requires bolder decentralization policies and more local and forward-looking development processes.

THE ROLE OF WOMEN IN ACCESS TO ENERGY

Access to renewable energy and gender equality are essential for sustainable development and for adaptation to climate change, as stipulated in Agenda 2030. In order to build sustainable environmental pathways (climate change adaptation, secure access to green and sustainable energy) and address gender inequalities, we must work to address women's engagement, education and empowerment. Gender, environment and climate change are cross-cutting issues and although we are observing some positive changes on the continent, a number of challenges persist, especially in relation to Africa's climate and energy policies.

More efforts must therefore be channelled into developing and implementing gender-sensitive climate policies and programmes that address energy issues. Indeed, if the gender, environment and climate issues are addressed simultaneously, and if political, research and knowledge-sharing coordination is strengthened, it will be possible to make progress on the sustainable development agenda, in the fight against climate change but also to reduce inequalities.



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By investing in women's access to renewable energy and climate technologies, we are promoting greater women's empowerment and independence. We are also accelerating their economic development, making their social and environmental impact more substantial.

Several ways to include gender in access to renewable energy:

- Women must be involved in decision-making and can play a leading role in promoting and decentralizing access to renewable energy;
- Apply an intersectoral approach in gender, climate and energy policies;
- Promote the efficient use of renewable energy by women, and reduce their time spent on unpaid domestic work;
- Target political activities in order to include gender issues into the climate and energy agendas
- Remove investment barriers and create equal opportunities for employment and access to new technologies;
- Shaping the budget planning process so as to finance the implementation of gender and climate sensitive solutions.

SENSIBILISATION / EDUCATION

With regard to environmental education of the population, it would be necessary to create a youth environmental training module that would include the issue of adaptation to climate change and the importance of developing access to renewable energy, particularly as a tool to combat social inequalities (guaranteed access for all and at a reduced cost). However, for education to have transformative power, it must be based on:

- 1/ active, inclusive and participatory teaching and learning processes ;
- 2/ qualified and inspiring teachers ;
- 3/ ties with communities and local concerns.

There is also a need to develop adult awareness campaigns, such as the implementation of UNESCO's Global Programme of Action (GAP) on Education for Sustainable Development (ESD). Detailed roadmap and the four strategic implementation points available here:

<https://en.unesco.org/gap/implementation>

DEVELOP AN EFFICIENT ENERGY AND WASTE MANAGEMENT SYSTEM

Waste, which can be used and recycled, is intrinsically linked to energy issues. Some cities facing rapid urbanization produce a significant amount of waste. This poorly managed waste is a major source of pollution for both people and the environment. But if well managed, they would offer many opportunities and benefits, especially in terms of energy, such as, for example biogas production.

On the other hand, renewable energy provides an important alternative for African populations, who are struggling to improve their quality of life. It provides important solutions, especially with regard to cooking by using innovative biomass instead of traditional biomass. These innovative cooking ovens reduce energy demand because their efficiency in converting biomass into heat is two to three times higher than traditional ones'. It is estimated that innovative biomass-based equipment will become the main cooking device across the continent by 2030.

RURAL COMMUNITIES' ACCESS TO RENEWABLE ENERGY



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Recognizing that many African people still live in the area, the continent has great potential to benefit from an inclusive approach to energy development. The use of mini renewable energy systems offers enormous socio-economic benefits for rural populations. They can plan and meet their energy needs because these modern renewable energy technologies can be broadly deployed. This technology itself is already a great asset for local regions and villages because they have no need to connect to a centralized electricity grid of mass distribution. Access to renewable energy provides many advantages in terms of health, education, agriculture, access to water and the telecommunications sector.

III – HOW TO GET THERE?

It is necessary to be realistic about the capacity of the actors to be mobilized in collective efforts, without a leader dedicating 100% of his/her time. The Climate Chance Association cannot provide a full-time human resource and relies on the actors involved in the coalition.

As such, it is proposed to initially target only two or three initiatives, which are to be included in the 2018/2019 roadmap in order to be realistic and to be able to measure progress.

- Mapping

We propose that the members of the coalition continuously carry out a mapping of interesting actors, good practices and projects that have a particular impact and can be replicated on a large scale.

Coalition members will be able to communicate this information to the Climate Chance Association, which will highlight them in its Climate Action Portal, its Library of thematic documentary resources and its Observatory's annual report

First proposition: the realisation of an in-depth mapping of African energy actors and the mobilisation of major actors who are not yet represented.

- Dissemination of information

To facilitate communication, a mailing group energies.af@climate-chance.org was created in order to encourage exchanges between actors who participated in the workshop. It will gradually accommodate new members. This is not necessarily the final tool, and a discussion will be held to determine which collaborative tool could be the most effective in the context of a multi-stakeholder approach in Africa.

A mailing list will allow to share all relevant information in the sector, such as: funding opportunities, calls for projects, training opportunities, interesting events, etc. It will be able to gradually welcome new members on request to the Climate Chance association team.

- Common agenda

Define the common agenda of the coalition, the next steps to evaluate the progress made, the next events to meet or present progress, etc

The coalition supporting this roadmap is co-managed by the following organizations:

ENGIE, GERES, ICLEI Afrique, REFACC, Schneider Electric, World Future Council.