

BULDING TOMORROW'S WORLD

ENERGY WORKFORCE

Energy & Youth Employment Summit 2018

www.eyesummit.org

Hotel Kaloum *****
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Conakry, Republic of Guinea

CONTEXT

In 2018 we will consume only 5% of the world clean energy potential and just 0,75% will actually come from clean energy (Krewitt 2009).

That means we could use 20 times more energy without facing any civilizational risk but we underestimate the clean energy potential by a factor of 133.

Renewable Energy harvesting imposes its own specific constraints, in particular it must be harvested locally and is unevenly distributed accross the globle. As the largerst pool of renewable energies in the world Africa holds 45% of the world renewable energy potential (REN21 2017) but only represents 3% of the world energy consumtion (IEA 2013).

This paradox suggests a 3 steps masterplan named after IRENA's African Clean Energy Corridor (IRENA 2014) to make Africa the world first clean energy workforce provider within 12 years. This will both maximize both the world energy effectiveness and minimize african endemic societal issues such as transforming the demographic divide.

Initiatives such as the chinese project One Belt And Road 2013 already start to accompany the settlement of national african energy infrastructures. Annual growth rate for renewable energy is around 0,43% yearly but some industries such as CSPs reach up to 42,6% annual growth.

By 2050 Clean Energy is expected to represent between 25% (IEA 2014) and up to 82% of the World Energy Mix (Greenpeace 2009) against 14% in 2018 (Energimyndigheten Sweden 2016) depending on the investment scenarii. The EYE Summit programme aims to reach this 82% target goal.



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INTRODUCTION

Designated by the UN as a core priority for the 2014-2024 decade and being part of the sub-criterion of the Sustainable Development Goals, energy access is one of the core issues for the African development.

In spite of important energetic resources available on the continent electricity access problems touches directly between 580 and 650 millions of people in sub-Saharan Africa, which represents about 70% of the population. In the end lack of infrastructures, political instability, lack of regulation, additional cost of sustainable energy investment are as many brakes against a proper energy delivery to the whole population.

While global conversations struggle around sustainable energy, unemployment keeps growing in the world and in particular in Africa. It seems urgent to find ways and means to ensure an ecological transition favorable to the next generations. This energetic transition presents enormous possibilities through skill upgrade for new generations on the key issue of sustainable energy.

His Excellency, President Alpha Condé, coordinator for the investments related to renewable energy in Africa is on the way to put on track efficient adaptation and mitigation policies for a transformational ecologic transition for the next generation.

It is in this context that Make It Real International and PRONG organize the EYESummit which should allow to create an action framework of advocacy and cooperation between stakeholders in order to build a regional specialization policy around renewable and sustainable energy allowing to take full advantage of the demographic dividend.

Thus, the present report is related to the ten days of preparation workshops of this summit that was held in Conakry, Republic of Guinea from the 21st to the 30th of May 2017.





ACHIEVING UNLIMITED POWER SUPPLY

WHAT MODEL FOR ENERGY IN AFRICA?

The African Clean Energy Corridor is a sustainable and interconnected energetic network of « smart grid » type extended to the continental level. It is directly inspired from the distributed distributed character of renewable energy.

It is based on a <u>reasonned entrepreneurship</u>, that is to say encouraging the creation of renewable energetic production infrastructures by local (public or private) actors based on the scientific understanding of the demand and local technical constraints.

It encourages the production of a clean energy in abundance, as well as the valorization of a high-end workforce over the whole value chain.

CONTEXT ANALYSIS

Through the <u>strategic design management</u> framework animated with the Make It Real technology, the capitalization on contributions from various stakeholders allowed us to build an ambitious yet realistic program for the Africa of Energy in 2030.

In a perspective of accelerating the implementation of the short, medium and long term EYES ummit program, Africa, with all of its energetic potential must become a leader on renewables by exploiting its green energetic resources and achieve its target goal to be able to represent at least 45% of clean energy production accross the globe. This innovative Africa will be able to get electrified and satisfy the energetic needs of its growing population.

Moreover, until 2030, thanks to the accessibility of technical and financial resources supported by a regional policy, the Africa's supply in renewable and sustainable energy will be greater than its demand, which will justify that the continent will be able to export between 60% and 90% of its energetic excess towards other demanding continent's countries thanks to the sustainable smart grid technology.

This will allow not only to ensure energetic efficiency and effectiveness, but also the mastery of the scientific domain as well as of the industrial transformation. Moreover hundreds of thousands of jobs will be created for the continent's youth which represents more than half of its population and the promotion of the sustainable and their renewable energy training will be recognized worldwide so that they can get employed anywhere in energy transition economies.

Our conviction is that renewable energies announce the beginning of a reset for the economic game in regard of opportunities related to sustainable development. It is now a matter of African execution speed around programs and projects based on sustainable energy.



WHY CLEAN ENERGY MATTERS

The global objective of EYE Summit is to conceive the African Clean Energy Corridor's roadmap as an institutionalized event (yearly) in order to establish mechanism of visionary leadership – necessary condition to federate an ecosystem on the long run – and secure the investment mechanism for all of its sponsors who will decide to support the Summit.

In particular, these different results must be reached:

- The collective definition of a detailed stakeholders commitments roadmap from 2018 to 2030
- Elaboration of a online and offline collaboration platform around achieving the African Clean Energy Corridor.

IT INDUCES THE SUBSECUENT BENEFITS

1. A sustainable energetic autonomy for each African country through the reasonned management of local resources in order to ensure a continuous access to energy for all, and for some a revenue related to its domestic production to free the average investment ability per person:

for the whole continent;

- 2. A balancing of the energy regime in the under-provided regions (in particular through rurality and carbo-dependent economies countries who should front face a phase shift on energetic transition);
- 3. The solving of the demographic dividend by creating abundant green jobs (for youth andwomeninparticular) which if it is not addressed to day will become an overwhelming center of cost
- 4. The opening of new markets by liberating lifestyles and industries based on a continuous energy consumption (factories etc.) and granting access to sustainable activities with stronger added value;
- 5. The emergence of an African label on renewable energies by a strong transformation of Africa's image abroad which will feed a new blow for the African soft power;
- 6. The consolidation of existing programs, for example for UNDP (Youth Employment Program), for UNFPA (Demographic dividend program), for the African Union (Agenda 2063, Investments related to renewables), for the Guinean Government (BOT law on private investments in green entrepreneurship), for the Ministère de l'Emploi de l'Enseignement Technique et de la Formation Professionnelle (Agence Nationale pour la Promotion de l'Emploi Jeune), Ministère de la Jeunesse (Fonds National pour l'Insertion des Jeunes) and many others.



THE 2030 ROADMAP

BY YEAR 2018

Invest in a yearly and institutionalized international gathering (EYESummit) bringing together the most influential stakeholders of renewable energy industry (expert audience, investors such as BAD, public and private African sector etc.) and of employment, especially for young people. This event will be based on a systematic basis on vanguard event technologies (large scale strategic design followed by a resource mobilization) in order to ensure the promise of an investment posture over the long run.

BY YEAR 2020

Invest in the world most advanced regional scientific research centers based in the best African universities (university research laboratories) around renewables energies in order to set available locally the results of its works (research studies, technological transfer through the diaspora in agreement with the international recommendations of the GIEC to reach the climate goal, animation of professional networks around the sharing of best practices, etc.) in order to ensure an up-to-date scientific mastery (continuous research) of the issues related to renewable energies at the continental level (active watch on the African energetic potential, state of art of existing infrastructure, environmental emergencies, energetic needs per regions, methods standards to prioritize, etc.) to maximize the innovation potential of the continent in order to be recognized as key trainers on the international level. The ability to take into account the local constraints must allow to develop endemic techniques, in particular for adaptation to the consequences of climate change. We will also have to consider the role of the hardships of transmission of information as a brake for the transmission of knowledge. Efficient investments appear to be about informatics and technical material, management employees for the centers and valorization of the scientific remuneration in order to make the job more attractive, in particular by putting their talents in the spotlight.

BY YEAR 2025

invest in the constitution of a university consortium of universities and professional schools and energy techniques in charge of the conception and setup of very high-end basic and continuous training programs on renewable energies extracted from the work's results of the research center. They will be in charge to be broadly put at disposal and they will have to be elaborated in common with professionals of the sector to ensure the up-to-date fitting between the needs and the production techniques. The know-how and infrastructure related to the transformation of waste into energy will have to be privileged as they benefit from relevant externalities in regard to the continent's issues. To achieve that it will be necessary to master the value chain from incitation to sorting (for example with a reward with the benefits generated by the commercialization of energy) in the sustainable housings optimized for waste sorting in order to facilitate the collect, which can also be achieved by NGOs or



other collecting units, the transfer, the storage and the transformation of waste into energy in the African industrial factories which will allow a progressive way out of the addiction to charcoal, oil and gas. A particular attention will be allocated to their promotion on local, national, continental and international levels in order to fully benefit from the branding effects that such a positioning implies. The core ambition being to train a critical mass of new technical and managerial elites for the sustainable energetic technology in Africa which is able to export in "in transition" economies. Indeed the unemployment issue can't be reduced through the domestic employment market only.

BY YEAR 2030

nvest in a management framework for the energetic infrastructure network of African countries (solar power plants, hydrodynamic dam on great African rivers, wind turbines) decentralized, distributed and interconnected (micro/mini) at continental scale. This includes for example the creation of dedicated funds, regulatory texts, human sourcing, African Agency, Institutions, independent and proprietary information systems, strategies and operating modes. This framework will have as mission to mutualize the coordinated redistribution of the local energy production to the least autonomous regions (in particular rural) by respecting the reporting, performance and sustainability standards ensuring its lasting quality. The setup of this network of sustainable infrastructure will be accompanied by the creation of an African expertise on feasibility studies related to renewable energies infrastructures, as well as the creation of African companies of sustainable energetic infrastructure work realization (« flagship » type) in order to capitalize on the sustainable industrialization techniques. This dynamism will allow to develop a professional body seasoned to commercialization techniques and to acquire a financial autonomy, entailing an African economic emancipation.

Beyond this self-reliance, it will also be about maximizing green quality energy production because of the local availability of a highly skilled and experimented workforce which will be able to absorb the totality of the local workload as well as the diaspora's circulation attracted by the region firstly, in order to create abundance. This abundance will have for mission to be reinvested in the revenue inducing activities for youth, women and active populations in general.

PREREOUISITES

Set voluntarist and prioritizing policies in terms of support, accompaniment, training to renewable energies and projects funding (factories creation, mini/micro dams, domestic energies etc.) in particular for youth and women as well as encouraging green entrepreneurship (regulatory framework in favor of the production of renewable energy, communication channels for experience sharing amongst entrepreneurs, etc.) in order to support the dynamics and long run legitimacy necessary for such ambition, in particular by caring deeply and with discernment about its integrity. Beforehand it is necessary to agree on the fact that R&D investment and training has direct implications on the ability to innovate and thus starting up, and the quality of the employee production of the population, which ultimately attracts the demand. This political mobilization won't be possible without the implication the private sector, ONGs and communities.



GET INVOLVED!

There are four (4) ways you can help us sustain EYE Summit:

- Funding partnership
- Visibility partnership
- Expertise partnership (Energy)
- Expertise partnership (Employment)

To apply as EYE official Partner send us an email at partnership@eyesummit.org.

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