





With the participation of





A word from

Pascal LOROT President, Choiseul Institute



With our new study focused on the Key Actors of Energy in Africa, the Choiseul Institute illustrates once more its commitment in identifying the protagonists who animate a formidable growth shared by many different economies on the continent.

Whether they're leading large, renowned groups at a continental level, international institutions or disruptive companies that meet local needs, the men and women presented in this panorama are key actors involved in Africa's energy challenges. The continent's future depends on their implication, talent and capacity to rethink practices and models.

If energy is indeed an economically strategic stake allowing industrialisation, automation and access to modern comfort, it is first and foremost a social issue. A reliable power distribution enables children to do their homework at night, rural villages to light up their dark alleys, populations to launch micro-businesses.

Energy is the source of our mobility, modernity, safety, growth and development. Today, too many African populations and regions are denied the capacity to make plans for the future because they don't have access to affordable and reliable energy. Large projects - however essential to Africa's highly awaited development struggle to see the light of day. The number of local initiatives is increasing but lacks in coordination. Funding is too scarce and even if investors grow interested in the continent, the amounts engaged remain low in comparison with the rest of the world. The regulations are complex and divergent; a regional – if not continental harmonisation is necessary.

These challenges are the responsibility of the energy field's actors. Considering their respective qualities and their will to nurture a long lasting implication with Africa and the Africans, there is no doubt that they will lead the continent into the light.

Lighting up the darkness. Such is their calling, their destiny.

A word from

Makhtar DIOP Vice-President Africa, World Bank



Energy: Africa, a continent with infinite potential

Africa's growth has been slowing down, due to the price decline of raw materials and uncertain international climate. But could this actually be a good sign? Statu quo is no longer an option as Africa needs to carry out the electricity challenge in order to win recognition in the world's economy. This debate didn't start yesterday and the task at hand is arduous, even if a lot has already been accomplished. Two Africans out of three - more than 600 million people - still don't have access to electricity. Without massive investments in the energy field, Africa won't manage to secure the necessary conditions of a sustainable and inclusive growth.

Africa has a major asset: it's at the dawn of an unprecedented green energy revolution. Resources are abundant - the hydraulic and solar potential is immense -, and countries like Morocco and Senegal are already betting on solar power plants, as the costs are dropping. In Kenya, the wind power industry has wind in the sails and the country aims at granting universal access to electricity to its people by 2020. The private sector is interested in the electricity marker as can be seen through the increase in projects carried by Independent Power Producers (IPP), which attract most of the private investments in the sector at the moment. In rural areas.

off-grid renewable energy projects flourish and financial backers invest heavily to help Africa conquer its most crucial challenge. Institutions such as the World Bank play the role of catalysts by bringing financial guarantees to private investors and working with governments to improving legal frameworks.

To speed up the process, there are three main conditions. Electrifying Africa requires that distribution companies are reformed to put an end to their governance and financial shortcomings. Guaranteeing their viability is essential as they are the main buyers of IPP-produced electricity. The distribution sector is the key to success. Then, the electrifying process would be much slower without the intervention of institutional investors such as pension funds and insurers. That task is currently undertaken by the World Bank as they are de-risking investments. The efforts to conduct regional networks of transmission (power pools) must not dwindle, and finally, institutional conditions must make it possible for these markets to work.

This study, dedicated to the actors of energy, is proof that this ever-growing sector attracts more and more forces. Now is the time for our promises to become reality.

A word from

Bruno BENSASSON

General Manager, Engie Africa



The African energy revolution is already on its way. Let's speed it up !

For two years, Engie has strived to strengthen its 60 years-long presence in Africa, that was mainly concentrated in South Africa and Northern Africa where we exploit or build 3,000MW via local partnerships. Two years ago, we decided to sustainably invest in Sub-Saharan Africa's heart in addition with our historic engineering brands, Tractebel or Coyne& Bellier.

Two years is not enough to fully grasp the reality of 54 countries and their diversity, complexity and subtlety. The fact is, truly knowing a society, whether African or otherwise, is probably impossible without spending the better part of your life there. But two years are enough to understand the importance of respect, the value of listening, dialogue and trust between two people.

Two years are long enough to understand that energy access is critical to a country's inclusive economic and social development. It is not its only key – education, health and safety are also capital. But energy is a key that facilitates and sometimes even generates the ones that follow. State leaders, influencers, international backers, business leaders, village mayors, nonprofit organisation members and even households: they all emphasise the need, the importance and the emergency of a viable, competitive energy for businesses, cities and households.

Africa is rich in natural and human resources and yet, its economies are still in cruel need of energy! It's particularly true of Sub-Saharan Africa's 800 million inhabitants, who see their power consumption limited to the equivalent of Poland's and whose access to power will not go over 40% because of limited production, transportation and distributions means. Will we manage to turn this unfair and unsustainable situation around long before 2040?

There is hope. In 10 years, the cost of fossil fuels and renewable energy has plummeted and Eastern and Western states managed to multiply their production and make up their deficit. Some managed to bring power to more than 95% of households and interesting innovations now allow us to connect with the most isolated regions. Others, in the North and South alike, set up specific regulations to attract the international competition which in turn some of the lowest fares in the world. But these initiatives, developed on the very continent, take a long time to spread out. What would help in propelling this process farther and faster? The States have already showcased their political will, the development banks their support, African electricians their skill and the foreign investors their interest. So what's missing? Some will say money, others will blame the lack of bankable projects or coherent regulations - with basic fares reflecting the costs and allowing a return on investment - or human resources. . Anyone is free to form an opinion on the matter but we do believe that these elements, however essential, will not replace dialogue and collaboration in sparking up ideas and solutions for the populations and economies of Africa.

That is why Engie decided to support the study project carried by Institut Choiseul to draw up a full picture of the key actors in the African energy field, wherever they may come from. This study does not aim at listing every single person in the field, but rather at facilitating communication and bridge the distance between/with these actors. It enables those interested to strengthen their bonds, to draw inspiration from their successes and learn from their failures, to work as part of a network and better coordinate their collective public and private efforts in order to find solutions and speed up the energy revolution currently taking place in Africa.

I would like to thank Institut Choiseul for this initiative and wish every key actor in the energy field a fruitful and long-lasting cooperation.

TABLE OF CONTENTS

METHODOLOGY	p. 8
AFRICA: KEY ACTORS OF THE ENERGY SECTOR	р. 9
- INDUSTRIAL ACTORS	p. 11
- NEWCOMERS	p. 15
- FINANCIAL ACTORS	p. 19
- INSTITUTIONAL ACTORS	p. 23
- INFLUENCERS	p. 27
STUDY AND ANALYSIS	p. 30
VERBATIM	P. 32
ABOUT	p. 35

METHODOLOGY

"Africa: the key actors of energy" is a panorama dedicated to the African personalities that actively shape the growth of the energy field in Africa. Whether they are leading high performing companies, first rate institutions or developing innovative solutions..., this panorama aims at identifying the most influent actors in the African energy industry at national, regional, continental, even global scales.

Our ambition is not to come up with an exhaustive list of all the actors of the field. They are legion, and many a profile more could have fitted this panorama. However, our goal is to show how diverse the profiles and careers of those who pursue ambitious goals for the growth of African energy.

Thus we were careful to respect the balance between large geographical areas (Northern, Eastern, Western, and Central Africa), the different types of activities (public/private, etc.), the types of energetic resources (wind, solar, hydraulic, thermal...), etc.

The Choiseul Institute worked on the project for months and sought help from experts on the continent in order to publish the most true-to-life panorama of the African economy's dynamic forces. More than 500 profiles were evaluated in the process.

AFRICA: KEY ACTORS OF THE ENERGY SECTOR

This panorama is dedicated to the key actors in African energy and showcases five categories:



INDUSTRIAL ACTORS

Leaders of energetic infrastructures, historic producers and distributors, regional large companies, etc.



NEWCOMERS

Leaders of minigrid exploitation companies, offgrid networks development, alternative distribution, etc.



FINANCIALS ACTORS

Leaders of investment funds and banks specialised in the sector, that finance energy-related projects.



INSTITUTIONAL ACTORS

Representatives of continental institutions, regional federations, and national organisations concerned by the energy-related issues as part of their agenda.



INFLUENCERS

The great African actors leading conglomerates having activity in direct connection with the energy sector as well as the most influent international organisations.

NOTA BENE

Only profils matching certain conditions were selected:

- being a Nationan of one of the 54 African States;

- Having an active contribution to the develompent of the energy sector in Africa.

INDUSTRIAL ACTORS

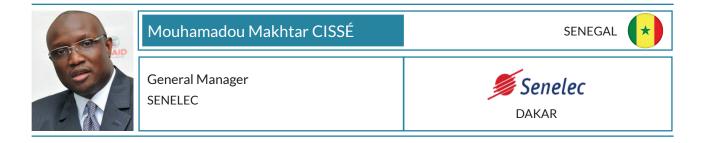
Network managers, gaz producers, power distributors... the industrial actors are invigorating the energy market on a daily basis. They bring energy to the population and the continent bloodforce and thus take part in the development of Africa.

The main stake that awaits the industrial actors is improving the quality and availability of energy on the entire continent; but also diversifying their energy ressources in order to minimise their exposure to the fluctuations of raw materials rates.

METHODOLOGY REMINDER

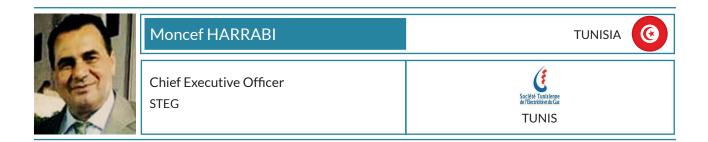
The Industrial Actors category gathers leaders of energetic infrastructures, historic producers and distributors, regional large companies, etc.

Azeb ASNAKE	
Chief Executive Officer ETHIOPIAN ELECTRIC POWER	እትዮጵያ ኤሌክትሪክ ኃይል Ethiopian Electric Power ADDIS ABEBA



	Ahmed EL SEWEDY	EGYPT
	Chief Executive Officer ELSEWEDY ELECTRIC	

Said ELHADI	MOROCCO 🔶
Chief Executive Officer NAREVA	





Paulino JERONIMO	ANGOLA
Chief Executive Officer	50nangol
SONANGOL	LUANDA

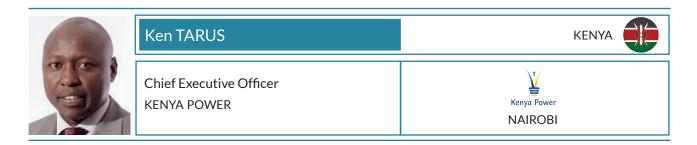


Dominique KAKOU	
General Manager COMPAGNIE IVOIRIENNE D'ÉLECTRICITÉ	ABIDJAN



Bongani NQWABABA	SOUTH AFRICA 📎
Chief Executive Officer SASOL	Sasol 🞉 Johannesburg

Abdelmoumen OULD KADDOUR	
Chief Executive Officer SONATRACH	ORAN





Jubril Adewale TINUBU	
Chief Executive Officer	Oando
OANDO PLC	LAGOS



Offgrid networks developers, solar farms designers, disruptive strategists... newcomers add a new dynamic to the market as they bring in new ideas and processes. Their agility allows them to respond swiftly when they face a problem and deploy flexible solutions to the many situations they encounter on the field.

Their main challenge is to apply they model to the continental scale and fully display their potential and become major actors of the African energy sector.

METHODOLOGY REMINDER

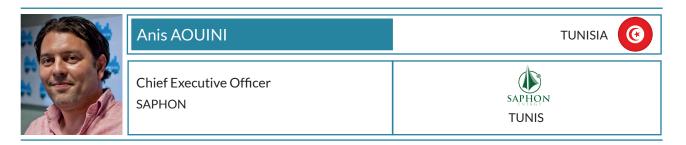
The New Comers category gathers leaders of minigrid exploitation companies, offgrid networks development, alternative distribution, etc.

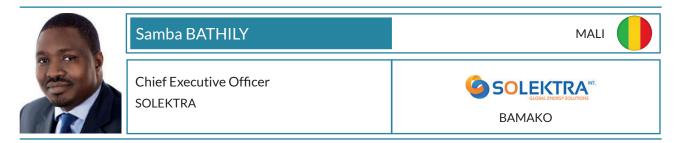
(30)

Sherife A	ABDELMESSIH	EGYPT
	utive Officer NERGY CORPORATION	CAIRO



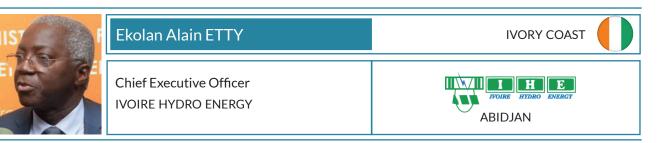
Femi ADEYEMO	
Chief Executive Officer	arnergy
ARNERGY	LAGOS







Chahar BOULAKHRAS	ALGERIA
Chief Executive Officer SKTM	GHARDAÏA





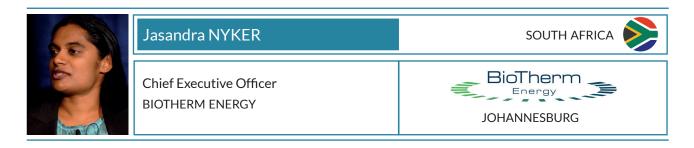
Hassanein HIRIDJEE	MADAGASCAR
Chief Executive Officer AXIAN	



Mugo KIBATI	
President	M-KOPA SOLAR
M-KOPA	NAIROBI

Patrick NGOWI	
Chief Executive Officer HELVETIC SOLAR	Helvetic Group ARUSHA

Henry NYAKARUNDI	RWANDA
Chief Executive Officer AFRICAN RENEWABLE ENERGY DISTRIBUTOR	Connect Share Fransect ARED KIGALI





Sean THOMAS	SOUTH AFRICA 📎
Chief Executive Officer BIO2WATT	JOHANNESBURG

FINANCIAL ACTORS

Investment funds, banking institutions, traditional banks... the financial actors continuously pour money into the energy projects in Africa. They are an unavoidable support of the industrial actors as well as newcomers in the sector. They allow the most ambitious projects to come to life.

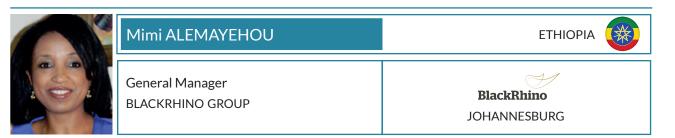
Their main challenge is to evaluate the risk level entailed in their investments considering the political unstability that is still prevalent in many regions. It is important to note however, that the small number of projects limits their possibility of diversifying their assets and thus, reducing the risks.

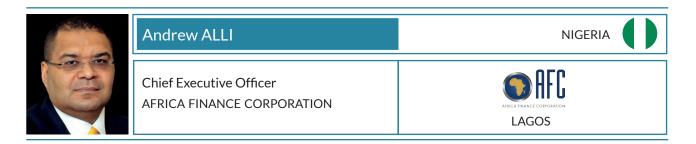
METHODOLOGY REMINDER

The Financial Actors category gathers leaders of investment funds and banks specialised in the sector, that finance energy-related projects and support he sectors' actors in their ambitions and development.

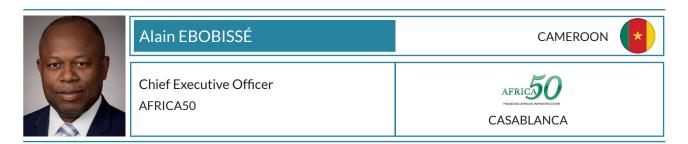
NOCO'

1	Christian ADOVELANDE	BENIN
	President WEST-AFRICAN DEVELOPMENT BANK	





Marilyn AMOBI	
Chief Executive Officer NIGERIAN BULK ELECTRICITY TRADING PLC	ABUJA



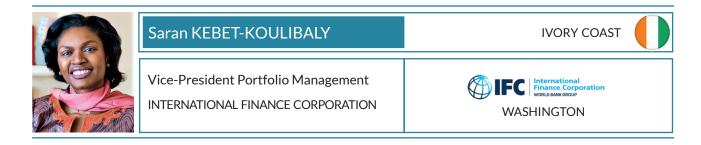




Jason HARLAN	SOUTH AFRICA
Chief Executive Officer FIELDSTONE AFRICA	FIELDSTONE JOHANNESBURG



Amadou HOTT	SENEGAL 🗡
Vice-President Power, Energy, Climate and Green Growth	
AFRICAN DEVELOPMENT BANK	ABIDJAN



Vincent LE GUENNOU	
Chief Executive Officer EMERGING CAPITAL PARTNERS	BRIVATE EQUITY ABIDJAN





Tarik SENHAJI	MOROCCO 💉
Chief Executive Officer ITHMAR CAPITAL	ITHMAR Capital
	RABAT

INSTITUTIONAL ACTORS

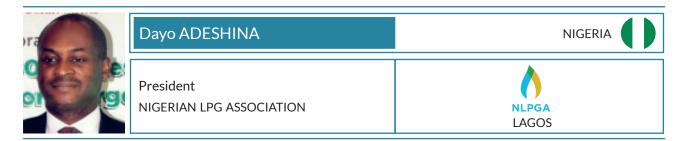
International and professional organisations, State agencies... Institutional actors are the heart of the regulation process on the continent for the field of energy. Their role is to ensure that the market rules surrounding competition are respected and to offer services that match the consumers' needs, and finally, to build reliable and tailored networks.

Their main challenge is to promote ambitious infrastructure projects to answer to the energy requirements of all populations and unify standards at a continental level.

METHODOLOGY REMINDER

The Institutional Actors category gathers representatives of continental institutions, regional federations, and national organisations concerned by the energy-related issues as part of their agenda.

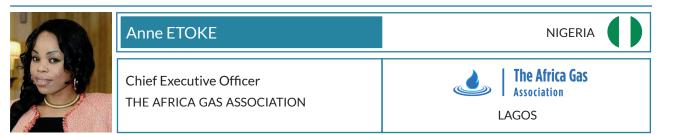
	Amani ABOU-ZEID	EGYPT
S	Commissioner AFRICAN UNION COMMISSION FOR INFRASTRUCTURE AND ENERGY	Union Africaine ADDIS-ABEBA



Mustapha BAKKOURY	MOROCCO 🔶
Chairman of the board MASEN	RABAT

Lebbi CHANGULLAH	
Secretary-General THE EASTERN AFRICA POWER POOL	THE EASTERN AFRICA POWER POOL ADDIS ABABA ADDIS-ABEBA









Usman GUR MOHAMMED	
Chairman WEST AFRICAN POWER POOL	West African Power Pool COTONOU



Mahama KAPPIAH	GHANA ★
General Manager ECOWAS CENTER FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY	ECOWAS CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY CONCENTRATE LEVER PRAÏA





INFLUENCERS

Experienced businessmen and manufacturers, international institution leaders... influencers can change the whole energy landscape in Africa with a simple decision. Thanks to their financial means and political influence, their capacity for action is tremendous.

Their main challenge is to organise their action as to improve their overall impact on the field. They also must maintain constant contact with the public authorities in charge of energetic questions in their intervention zones.

METHODOLOGY REMINDER

The Influencers category gathers great African actors leading conglomerates having activity in direct connection with the energy sector as well as the most influent international organisations.

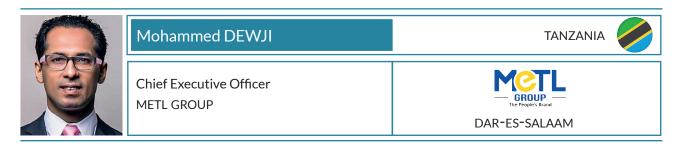
Akinwumi ADESINA	
President AFRICAN DEVELOPMENT BANK	ABIDJAN



 Aziz AKHANNOUCH	MOROCCO 💉
 President AKWA GROUP	CASABLANCA

Folorunsho ALAKIJA	
Vice Presidente FAMFA OIL	FAMFA GIL LAGOS

Aliko DANGOTE	
President DANGOTE GROUP	DANGOTE LAGOS





Tony ELUMELU	
President THE TONY ELUMELU FOUNDATION	THE TONY ELUMELU FOUNDATION LAGOS



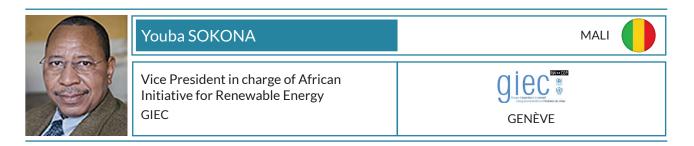
Elham IBRAHIM	EGYPT
Vice President WORLD ENERGY COUNCIL	WORLD ENERGY COUNCIL LONDON



MoIBRAHIM	SUDAN
President MO IBRAHIM FOUNDATION	



Naguib SAWIRIS	EGYPT
Chief Executive Officer ORASCOM TMT	CAIRO





Véra SONGWE	
Executive Secretary ECONOMIC COMMISSION FOR AFRICA	United Varianti Exemption for Africa ADDIS-ABEBA

ENERGY IN AFRICA

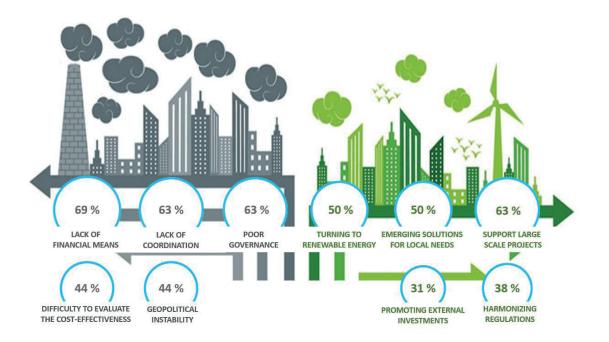
In order to better understand the stakes of energy in Africa, we sent a six-part questionnaire to the actors identified in this study. The results allowed us to draw a detailed portrait of the challenges, obstacles and opportunities encountered by the main actors of the field on a continental scale.

First and foremost, the surveyed people shared their global perception of energy in Africa. A vast majority considered it a pillar of growth and that opportunities were legion, although some added that the field itself was sometimes an obstacle to development, and presented a major challenge for the future.



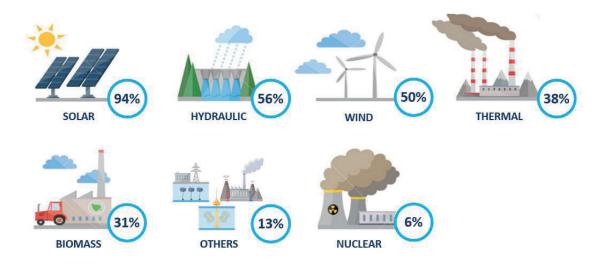
A FIELD AT A CROSSROADS

The surveyed people were then asked to detail what obstacles had played a part in slowing down the field's development, and what challenges they would have to face to realise its full potential in Africa. The lack of means and interstate coordination as well as unsatisfactory leadership were deemed major hindrances. On the contrary, some answers showed that setting up regional, even continental projects would be decisive, as well as the key actors' capacity to come up with solutions adapted to local needs and willingness to consider renewable energy.

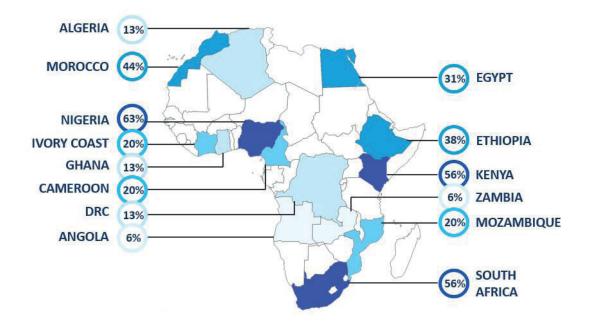


STRONG POTENTIALS INEQUALITIES

Beyond the global problems, the issue of energetic sources was raised. The surveyed people gave us their top 3 most promising energy sources, of which renewable energies were the most cited. At a continental level, the renewable energy resources are endless, thus, solar energy was widely mentioned, followed by hydraulic and wind power. Thermal energy remained present, due to the continent's large resources in hydrocarbons. Biomass energy followed closely while the nuclear energy was falling behind.



The geographical issue is equally of the utmost importance. The surveyed people ranked the five countries they deemed most promising in terms of energy mix. Unsurprisingly, the main economies find themselves at the top of the ranking. Interestingly, no top country produces oil, with the exception of Nigeria. They were incented to diversify their energy sources in order to be less dependent on the fluctuating international oil markets and invest more in alternative solutions and renewable sources of energy. The top countries of this list also sport a political and economic environment favourable to the field.



VERBATIMS

The last part of our questionnaire allowed those who answered it to give us their own sentiment of the main challenges faced by Africa when it comes to energy. Their selected answers is very revealing of the potential and importance of the field for the continent's future.



⁴⁴ It is vital to develop decentralised solutions that make use of sustainable energy resources such as wind, solar, biomass. With progress in battery storage and fuel cells I believe we have to re-think the existing model.

VERA SONGWE

⁶⁶ While in some cases a number of relatively well-established tools are available, much more work is necessary to adequately address other types of effects, such as impacts on energy infrastructure and electricity production, human health, local and global environmental change, and the provision of ecosystem services.²²



LEBI CHANGULLAH

HASSANEIN HIRIDJEE



[•] We need to encourage off-grid and mini-grid solutions to complete the traditional system and ensure Africa a universal access to energy as well as better management for power companies – they must operate strictly commercially. Proper regulations should also speed up projects and attract private institutional capitals. ²²

AMADOU HOTT

Financial guarantees are crucial to deploying energetic infrastructures in Africa. Setting up a guarantee fund would reassure investors and entice them to invest more in the region.





⁴⁴ Africa will have to overcome many challenges: its own development, bringing poverty to an end, fighting climate change and meeting the sustainable development goals. For this to happen, the continent must rely on all necessary means to fulfill its diverse potential in renewable energy sources through systems of smart grids facing the future.

YOUBA SOKONA

⁶⁶ The sector is decentralising more and more. Projects tend to use close proximity networks, notably in developing domestic solar power systems. Large infrastructure projects aim at meeting industrial needs. ²²



HENRI NYAKARUNDI



⁶⁶ Deploying the energy field is essential to development in general. Projects need ever growing funding, especially in their study phase. Putting an emphasis on supporting interconnected projects would allow sharing financial means as well as risks

EKOLAN ALAIN ETYY

⁶⁶ I would like to state that the biggest challenge to really getting power projects completed in Africa is a lack of political and government will. In Africa, we have a saying: "to be in power, you need to give power", but that idea never seems to last longer than a political campaign. Don't get me wrong, some leaders in Africa are doing great things, we simply wish more could follow suit, and with a greater sense of urgency.



JASANDRA NYKER



⁶⁶ The future of energy in Africa is dependent on how quickly we can deploy an off-grid solution for most african countries. There is a need for massive investment in energy infrastructure and this can be done with the right policies to make the atmosphere conducive for investors.

DAYO ADESHINA

⁶⁶ Accessing energy is an essential component of any economic, social and political development. Africa's future can only be attained through good governance of the territory's energetic resources, interdependence and community of interest among all African countries.



MAHAMAN LAOUAN GAYA

⁴⁴ Africa has the potentials for an incredible energy future. But we must be realistic as to harness this potentials. Regulations, Financing, Regions/Continental corporations, Geopolitical stability and Governance are issues amongst others that might affect this energy future for Africa. We must look for common solutions to these problems at the regional and continental level to help attain this vision.

ANNE ETOKE

⁶⁶ My aim for the entire African population to access cheap energy as part of a large market of electrical power exchanges. This market shall be integrated and harmonised at each level of regional community and produce clean energy with the help of a dynamic private-public partnership. ⁹⁹

ROGER HOUNKANRIN





⁶⁶ The African energy sector is a true development opportunity in and of itself. It's also a levering agent for all the continental potentials and legitimate regional integration. ⁹⁹

ABOUT



The World Bank Group is one of the world's largest sources of funding and knowledge for developing countries. Its five institutions share a commitment to reducing poverty, increasing shared prosperity, and promoting sustainable development.

It was created in 1944 and is located in Washington. The World Bank accounts for 10000 agents dispatched in more than 120 offices in the entire world.



Engie has been active for more than 60 years in many an African country through its energy engineering jobs and different brands; for 50 years through its long-term gas and LNG purchase contracts with Algeria, Egypt and Nigeria; and for 5 years as independent power producer in South Africa and Morocco with a 3,000 MW capacity in exploitation or construction. Engie has had four main regional development offices since 2016: in Northern, Southern, Eastern and Central and Western Africa. By 2025, Engie aims at becoming a reference partner in a dozen of African countries for power plants, company-driven energy services and decentralised solutions for our clients – communities, companies and households – that are not connected. This African development strategy is a key part of the group's global objective: give access to competitive, dependable and environment-friendly power.

- INSTITUT -CHOISEUL

The Institut Choiseul is an independent think tank specialised on the analysis of international strategic questions and economic leadership. Located in Paris, it strives at creating spaces of independent dialogue joining the political and institutional worlds to the sphere of economics and ideas to foster good debates on contemporary issues.

As it organises events of prestige and casual meetings between the world's main leaders in Paris, Brussels or Africa, and distributes its publications among the decision makers and influent opinion leaders, Institut Choiseul constantly feeds the decisions taken by the political and economic actors.

- INSTITUT -CHOISEUL

16, rue du Pont Neuf | 75001 Paris, France Tél. : + 33 1 53 34 09 93 contact@choiseul.info www.choiseul.info

Institut Choiseul Paris

.

.

.

.

www.choiseul.info