

Why Energy Remains Key to Africa's Development

FEATURE

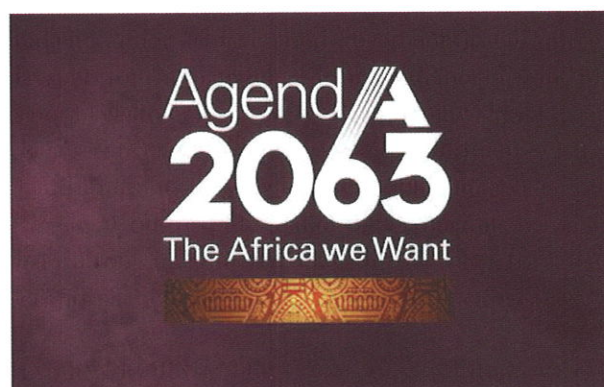
By James Akpandem

One of the cardinal aspirations of African leaders as embedded in Agenda 2063 – The Africa we want document, is to have a prosperous Africa based on inclusive growth and sustainable development. The goal being to eradicate poverty in one generation and build shared prosperity through social and economic transformation of the continent. “We aspire that by 2063, Africa shall be a prosperous continent, with the means and resources to drive its own development, with sustainable and long-term stewardship of its resources.” Attainment of this goal will form the basis for the fundamental realisation of the other six aspirations because without inclusive growth and sustainable development, Africa cannot in real terms talk about an integrated continent that is politically united. It cannot achieve good governance, democracy and respect for human rights, justice, and the rule of law. It is not likely to have a peaceful and secure continent with a strong cultural identity, common heritage, values, and ethics; an Africa whose development is people-driven, relying on the potential of the people; and an Africa that is strong and united; and ready to be an influential player and partner in the global arena.

ENERGY AND DEVELOPMENT

Energy plays the most significant role in the economic growth, progress, and development of any country. Every conceivable aspect of social and economic development can be fundamentally linked to the use of energy; be it in infrastructure and basic services like education, health, nutrition, water, shelter, sanitation or in wealth creation.

The Industrial Revolution which began in Britain in the 18th century was characterised by technological, socioeconomic and cultural factors; but the major defining factor was technology, and this was driven by new energy sources which were chiefly fuels and motive power. The components were coal, the steam engine, electricity, petroleum, and the internal-combustion engine. The other levels of technological changes, including use of iron and steel, invention of new machines, the factory system, transportation, and communication and increasing application of science to industry were all given impetus by energy, which also assisted human resources in the processes that culminated in the revolution. It helped in efficiency and enhancement of production levels.



At the early stages of energy development, fuels and motive power were the main sources, and these were largely dependent on fossil fuels which were high in carbon, which emission surging towards 40,000 Mt of



carbon dioxide (Co₂) per annum, constituted risks to the environment. The Organization of Economic Cooperation and Development (OECD) nations consequently pursued strategies to limit harmful emissions by putting in more efforts and resources into developing cleaner and more environmentally friendly energy resources. Meanwhile, non-OECD nations still rely on fossil fuel resources, for their development. There are indications that it is likely to get to that limit before slowing down. Given this scenario, the limit set by the Paris Agreement to constrain global temperature rise to less than 1.5 °C, looks unrealistic as far as development by developing countries is concerned.

Africa is home to the world's youngest and fastest growing population. To create jobs and enable industrialisation, the level and quality of energy services must increase remarkably. Reliable and affordable energy is fundamental to rapid development. The aggregate development of a continent stems from the individual and, or collective prosperity of the component countries. Africa cannot be said to be developed if the countries that constitute the continent are themselves not growing. Sustained economic growth fundamentally rests on the long-term availability of energy from sources that are affordable, accessible, and environmentally friendly. Energy services not only support but drive industrialisation, value-chain agriculture, increased trade, and improved transportation. These fundamentally are the core growth drivers and essential ingredients for develop-

ment. Africa desires to advance to the next level of development and, by 2063, countries in the continent are expected to be amongst the best performers in the global quality of life measures, including improved social status, security, and environment. This is planned to be realised through strategies of inclusive growth, job creation, increased agricultural production; investments in science, technology, research and innovation; gender equality, and the provision of basic services.



Lofty as this desire might be, it cannot be realised without a deliberately planned, coordinated and sustainable energy infrastructure. Although Africa is blessed with abundant energy resources, it suffers energy poverty, harbouring the largest number of people without access to modern energy services. Sub-Sahara constitutes about 75% of the almost 800 million people globally without access to electricity. The continent is responsible for just 3.2% of energy usage within the world space. And this is despite the abundance of fossil fuels and renewable energy sources in it.

For Africa to achieve its development agenda, there must be a deliberate and strategic support system for the comprehensive development of its hydrocarbon and energy sectors - hydrocarbon being the most accessible and readily available economy driver and energy resource in some countries of the continent. The development must be well planned, sustainable and coordinated. African countries must have correct estimates of their various energy resources and seek collaboration in

relevant and related institutions on the path towards the global energy transition.

Realising the project in the short, medium, and long term would require collaboration among development institutions in Africa in areas of common interests; to coordinate their various initiatives and foster sustainable capacity within and across the continent. In order to boost the master-plan, this would require creating alliances of financing facilities covering the entire continent and even countries outside the continent - focusing on financing extractive industries, acquisition of skills in structuring complex transactions, facilitating market penetration plans as well as developing critical projects across the continent.

Probably that was why the African Petroleum Producers Organization (APPO) embarked on a major reform aimed at sharpening its focus; enhancing professionalism and strengthening the capacity of its secretariat to conduct studies that would enhance the productivity of the African oil and gas industry, especially investing in trans-national infrastructure like pipelines and refineries and the development of local content.

It also embarked on the reform and recapitalisation of the APPO Fund for Technical Development from which it created the African Energy Investment Corporation (AEICorp), to support the development of Africa's hydrocarbon and energy sectors.

The move was strategic because countries must first develop the hydro-carbon resources that form their energy source and then electricity which is the vector that makes energy available for industrial and development purposes. Both are elements of energy. Massive investments in both hydrocarbon potentials and electricity will enable significant synergies within the value chain of the energy sector of the economies of the various countries and push development index across the continent.

Realising the importance of energy as a veritable catalyst in development, some African countries also keyed into the process by embarking on reforms that would ensure effective utilisation of easily available energy resources to enhance their economic status.

Their development plans target growth and job creation with a renewed focus on digital economy, significant value addition in agriculture, improving transportation infrastructure, ensuring energy sufficiency in power and

petroleum products, and boosting production generally. They lay emphasis on energy resources because it provides the fulcrum on which development is given impetus, which in turn engenders beneficial trade policies, including expansion of the supply sides of revenues as well as enhanced foreign exchange for macro-economic stability.

POTENTIALS AND THREATS

Africa is rich in hydrocarbons, as an energy resource; but there is already a lingering threat to the future relevance of the resource because of the prescriptions of the Paris agreement, which seeks to limit the development of oil and gas projects in the pursuit of the zero-emission plan. It poses a very serious challenge with dire consequences; and is particularly unhelpful in the development pursuits of developing countries, most of which are found in Africa. Without basic infrastructure to drive industrialisation, create jobs and reduce the rising unemployment levels, Africa cannot in real terms be talking about development.

In early October 2021 Nigeria's Vice President, Prof Yemi Osinbajo, at separate meetings with then COP26 President Alok Sharma; the academic community at Imperial College, London, the Global Energy Alliance, and presentations on Nigeria's Energy Transition Plan and Nigeria's Integrated Energy Plan, which all took place in the UK, made the point that limiting the development of gas projects poses dire challenges.

He raised the issue again later in October during a virtual



panel discussion on “A Just Transition: Balancing Climate Mitigation with Africa’s Development,” organised by the Tony Blair Institute for Global Change; and also, in early January 2022 at the World Economic Forum in Davos.

Ahead of the COP 26 Summit, which took place on October 31 and November 13, in Glasgow, Scotland, African countries had made a case for some concessions, the expectation being that more developed countries would change the direction of the conversation around energy transition to benefit the continent at the global Conference, which they saw an opportunity to engage and change the direction of the current conversation on the pace of the energy transition as it affects Africa.

Incidentally, COP 26 did not arrive at a consensus on the crucial issues because most of the conversations around carbon emissions and energy production were escalated on the platform of national/regional interests, giving rise to divergent positions. The post-industrial nations wanted an immediate and severe shift in energy production and usage from carbon to renewable and clean energy. The emerging energy giants of the Middle East wanted more time to push a new economic renaissance based on exploiting carbon energy as a launch pad into a knowledge economy that relies less on carbon energy but more on technology and innovation.

Though heavily reliant on fossil fuel energy now, developing countries were not averse to the push towards transition to clean energy, but were calling for assistance from developed countries to push the process and also, make oil and gas cleaner. This aligns with the dominant position espoused across developing countries. The consensus seems to be that to tackle carbon emissions, action should not be taken at the expense of the millions trapped in poverty, that attainment of zero-emission and the Sustainable Development Goals, especially SDG7, are mutually reinforcing. The point here is that the devolving countries must be given the enablement to for economic development. Climate justice will therefore require a major shift in technology and commitment of finances to meet the cost of adaptation and mitigation in such nations. Nonetheless, African countries are not just waiting cap in hand for these.

They are working internally to address the situation. For instance, on December 1, 2020 in Cairo, a Framework Agreement was signed between the African Export-Import Bank (Afreximbank) and AEICorp to collabo-

rate in areas of common interests, coordinate their various initiatives and foster sustainable capacity of the countries.

The Agreement is expected to birth a solid plan aimed at pushing investment across the entire continent as well as relevant countries outside, in the energy and mining sectors. Some countries are also exploring the window opened by the African Development Bank, (AfDB) through the Sustainable Energy Fund for Africa’s (SEFA) multi-donor special fund, which provides catalytic finance to unlock private sector investments in renewable energy and energy efficiency.

The goal of the fund is to contribute to universal access to affordable, reliable, sustainable, and modern energy services for the entire continent in line with the New Deal on Energy for Africa and Sustainable Development Goal 7. Already, the Democratic Republic of Congo, Burkina Faso, Gabon, and Botswana have benefited from the green energy programmes through SEFA. It also supports Kenya’s power and lighting company, Super ESCO.

In addition, Nigeria recently approved the Petroleum Industry Act (PIA) which, among other expectations, is to enhance and attract local and foreign investments; and particularly create a unique governance and regulatory structure for the industry. The country also came out with an electrification roadmap that is tailored to facelift the energy sector and position the country in the global energy transition market. These are in addition to a commitment to improving the energy mix through greater use of renewable energy. The aim, basically, is to boost the economy and drive inclusive growth and sustainable development, underscoring the importance of energy in the development agenda.

The issue remains that most countries in Africa rely heavily on fossil fuel energy which is prone to carbon emissions. It is also a major source of foreign exchange earnings for quite several countries.

With the emerging scenario following the determination of the global community to deal with the threats posed by climate change, players in the oil and gas sector would have to explore other strategic financing options for the speedy development of the energy sector if they are to remain relevant in the face of reduced global investments.

This is so because given the current situation, de-

carbonising of fossil fuels might still take a while to get through in Africa because some countries are not yet ready for zero-emission energy sources. The zero-emission plan 2050 therefore remains a threat to Africa's development as foreign investments may continue to decline because.

CONCERN AND WAY FORWARD

Although investments in fossil fuel energy may not be coming in streams as expected from foreign investors, developed countries nonetheless acknowledge the fact that immediate transition to clean energy might be challenging for developing countries, which is why some are suggesting the use of gas as a transitional fuel.

Their position is that this is not only essential for development but also necessary for the sustenance of the environment. This is where the issue of partnership becomes absolutely necessary to crowd-source necessary funding to put projects for clean energy and development in Africa on an investable footing. Just as the former United Kingdom (UK) Prime Minister, Tony Blair noted, when investments are made in Africa, the rate of returns is usually very good, and the risks are not as great as assumed.

Africa has great potentials. It requires strategic harmonisation of sustainable ideas and programmed co-ordination on what could be done in concrete terms, and how to diligently go about it.

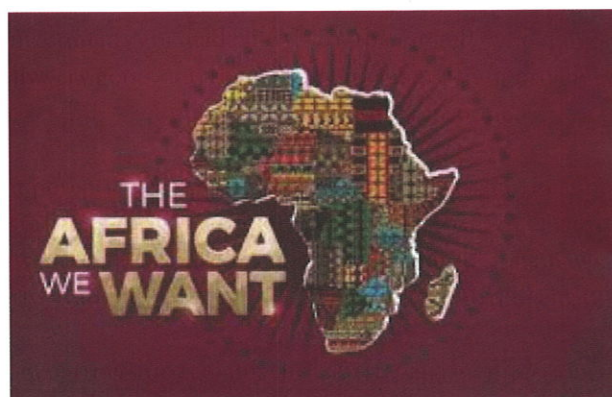
In this direction, partnership remains the key strategy. It is noteworthy that the energy security of the African continent is highly dependent on de-carbonisation. On the basis of this, industry players who have seen the dangers this would pose to development of the continent in the short and medium term, have variously canvassed that focus of investments in the hydrocarbons sector

should rather be on de-carbonisation of fossil fuels instead of abandonment.

While that is being pushed, attention must also be focused on increasing the supply of electricity through mini-grids and enhancing solar power connections as well as allowing integrated power companies to emerge, instead of focusing solely on managing the national grids.

The global concern is more about carbon emissions and its effect on climate change. They fear that continued investment in fossil fuel development might further imperil the environment and worsen the already threatening situation caused by climate change. In real terms, Africa's contribution to global emissions for now is relatively low.

Records show that it is just about 3.8% in a continent that constitutes 17% of the global population. Comparatively, United States and China's emissions are fifteen and seven times more, respectively. Notwithstanding, Africa needs to look at what it can do differently to have a just,



equitable and inclusive transition while working on having a transition space for gas.

As observed by the Executive Secretary for UN Commission for Africa, Dr Vera Songwe at a virtual panel discussion last year, if Africa were to double its energy generation, which means every African will have access to electricity, it would increase global emissions by 1%. It could then move rapidly to the multiplication of solar and wind investments by 38%. It would be doing less of gas as a result. At that panel discussion Prof. Osinbajo, had said the conversation surrounding energy transition should be on practicable solutions that would lead to sustainable investments in critical areas to help the rapid development of countries on the continent.

CONCLUSION

It is a fact that Africa's development status requires significant increase in the scale and quality of energy services; and this also includes development of clean and renewable energy. It has the potential to generate up to 11,000 GW of electricity, and the capacity to utilise solar power, wind energy, natural gas, hydroelectricity and fossil fuels.