IEA's Net Zero Greenhouse Gas Emissions Push:

Why Africa Cannot Afford to Cut Off Its Nose to Spite Its Face in the "Developed World's" Clamour for Energy Transition!

Proem

On the 18th of May, 2021, the International Energy Agency ("IEA"), released a publication entitled, "Net Zero by 2050: A Roadmap for the Global Energy Sector" (the "Roadmap"). The Roadmap draws the plans for the global energy sector to reach "net zero" greenhouse gas emissions by 2050. In this writer's view, the Roadmap was published in furtherance of the Western world's and indeed, the IEA's clamour, for energy transition. For clarity, energy transition is, in relation to energy utilization, a shift towards a continuous reduction in the use of fossil fuels to non-fossil sources with the intention to have the world's energy needs ultimately met, primarily, via non-carbon means.

Since the Roadmap seeks to provide a guide to achieving "net zero greenhouse gas emissions", shall we describe what this means?net-zero greenhouse gas emissions means the volume of greenhouse gases discharged into the atmosphere would correspond with, or in other words, will be equal to the volume of greenhouse gas emissions being removed or captured from the atmosphere. The IEA continues to insist that measures such as carbon capture and sequestration will not give the desired result as emissions continue to increase. Rather, in the IEA's view, there should be an immediate and substantial move to renewable energy sources including solar, wind, and hydro. The foregoing would appear laudable. Is it? From a purely idealistic environmental point of view, it is! However, from a global realistic point of view, maybe not; particularly from a developing or less developed country's point of view countries looking to industrialise, require massive energy especially those who have large deposits of fossil fuels they may use to industrialize.

An Altruistic or Self-Serving Plan?

Many may think the push for net-zero greenhouse emissions is altruistic,

I say it is self-serving, at best, and you may ask why so? According to the Roadmap, some of the critical steps for achieving the net-zero greenhouse emissions status include that there should be no new sale of fossil fuel boilers (used for heating, power generation, etc.) after the year 2025; no new investments in new fossil fuel supply (including oil, gas, coal, and bitumen) after the year 2021; and no new internal combustion engine car sale (that is your typical car that uses premium motor spirit or diesel -recall that over 90% of Africans use such vehicles) after the year 2035 and note, this idea is to be a global one. Added to the foregoing is that 60% of the cars to be sold by 2030 should be electric cars and 50% of heavy truck sales should be electric, from the year 2035. In all, it is expected that for success to be achieved, there must be energy access to all, within nine (9) years, that is, by the year 2030!

These ideas sound quite grandiose when you consider that many African countries are struggling, despite being endowed with enormous fossil fuel deposits and can barely provide sufficient electricity or heating for their populace, let alone the deployment and use of more expensive renewables and increased spending to provide subsidies for renewable energy. With investments needed to achieve the net-zero result being around \$5 trillion annually by the year 2030, the plan would appear a pipe dream. Without international assistance, support and investment, especially in Africa, this will not be achieved. It is also germane to note that, to succeed, such investments cannot be implemented only in reasonably attractive African economies, but the entirety of the continent regardless of the state of the relevant economy.

Also, the writer is of the view that the approach of the IEA is self-serving because much of the Western world achieved industrial growth, economic growth, and development using fossil fuels.

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Not just fossil fuels, but 'heavy' fossil fuels, at a time where much of the developing world which holds a large percentage of the hydrocarbon deposits was not ready for industrialization. It is clear that fossil fuels fundamentally empowered America and indeed, the Western world to achieve industrial growth during what has been referred to, as the industrial revolution. Fossil fuels like coal, powered technologies, amplified the strength, stamina, and precision of workers in the developed world making the labour force of countries like the United States, amongst the most productive in the World.

In fact, according to Sciencing.com, the main resource used to produce energy during the Industrial Revolution was coal. You are probably screaming wow! The opportunities for energy utilization in Africa are increasing, driven by industrialization, digitization, and changing expectations of energy consumers mostly comprised of artisans, self-generators, and industrial power utilities all driving towards powering the continent with a population of nearly 1.4 billion people. There is also new infrastructure being built for hydrocarbons, especially gas utilization.

This is the time Africa is moving towards energy-powered industrialization cum economic growth and development, with factories springing up in places like Nigeria, South Africa, Rwanda, Kenya, Ethiopia, and Ghana. Thus, it will be inequitable to expect the same measures around the reduction of greenhouse gas emissions to be taken in these countries as may be the case in places like the United States, China or indeed Russia or even India. No African country ranks amongst the top 10 emitters of greenhouse gases and South Africa is the only African country, amongst the top 20 gas emitting countries in the World.

Apart from the economic and industrial growth some of these African countries are experiencing, the hydrocarbon-rich ones amongst them, mostly rely on revenue from hydrocarbons to sustain their economies and ensure that the citizenry can live, at least modestly. Things aren't particularly great with many of these countries and things will get much worse, where the plans are implemented to detail, as these countries do not have the wherewithal to replace, anytime soon, their fossil fuels-based economy and productive activities with renewables. It will mean, in the words of the IEA, a total transformation of the energy systems that underpin the economies of many African countries.

What then convinces one the most about the unrealistic nature of the plan is that for the plan to succeed, there must be universal access to energy by the year 2030 and clearly, as far as Africa is concerned, this is not realistic! Many countries in sub-Saharan Africa, in particular, cannot guarantee access to energy to even half of their population, let alone universal access to energy. All said, it would appear from a developing country or less developed country point of view, that the net-zero plan is more self-serving than altruistic.

More Altruistic Alternatives anybody?

First, the writer is of the view that we should protect that environment and ultimately the world, for future generations. However, it may not be equitable to expect that countries like China and Ghana for example should have the same level of obligations to reduce the emission of greenhouse gases. Countries in Africa should ultimately reduce same; but should do this, more slowly and have up to three times the period, countries like the United States of America and China do have, considering their population, level of greenhouse gas emissions, and extent of industrialization or development. What should be done instead is to encourage more carbon capture and sequestration technologies and capabilities. There should be the encouragement of practices that will have countries utilize flare gas or gas that would ordinarily have been flared. There should also be financial incentives to develop technology around concepts such as clean coal and clean coal technology. Then more and more countries should be encouraged to act like Qatar which has placed more emphasis on gas, which is a much cleaner fossil fuel. For the writer, the question many fossil-rich developing country ought to be asking is what the West wants them to do with their enormous fossil fuel deposits? Since fossil fuels are finite, the world may need to wait for same to run out first, whilst steps continue to gradually replace fossils with renewables and other clean energy options, but thirty (30) years won't cut it! We cant completely or nearly completely, in Africa, phase-out fossil fuels of fossil fuelsbased productive activities or even products like cars.

For a country like Nigeria, whilst seeking to transition, it does make sense for the country to stop at the 'gas bus stop' for a while, before gradually moving to full-on renewables, especially considering that gas is also quite clean and a country like Nigeria does have in abundance.

A number of African countries are rich in gas resources and are newly developing gas infrastructure. Some of them are also looking at gas monetization projects and infrastructural development like the popular AKK project in Nigeria, to achieve gas-centric economic development. A country like Nigeria has declared the years 2021- 2030 as the Decade of Gas to promote the use of resources it does have in abundance. The option for such countries will appear to be to first apply a stop-gap of gas utilization before gradually transiting to renewable energy sources. The writer refers to that, as the concept of a gas bus stop.

Also, increasingly, countries like Nigeria are developing programs to utilize what would otherwise have been gas emissions and amongst such programs are the gas flare commercialization program. This is a local Nigerian solution to wastage and environmental pollution. This, thus suggests that local solutions may be found more effective, especially when implemented as collaborative approaches. Same may be more fruitful than what may be considered a somewhat myopic approach, which seeks to keep the developing and under-developed world in energy poverty.

Conclusion

For many of the developing and less developed countries which are rich in fossil fuels, especially natural gas, rather than be dictated to by the West, it does appear to make sense for each country, particularly in Africa, to take steps in reducing emissions; in a manner and at a pace that takes each country's own peculiar municipal or local circumstances, into consideration. Such circumstances include each country's energy needs and use, together with the state of its economy and type of economic growth it requires, without forgetting what is most advantageous for such a country to power its economic growth. Finally, as suggested above, a more realistic, yet collaborative approach, may be more effective, rather than a self-serving one that appears to prefer to keep the developing and under-developed world in energy and economic poverty with a large measure of reliance on Western support.

