

PODCAST TRANSCRIPT

A Sustainable Energy Future for Africa

Episode title: Is SDG 7 within reach?

Guests: Ifey Ikeonu and Victor Otieno

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Christine Juta:	<p>Welcome to a sustainable energy future for Africa. A podcast series offered by the African School of regulation (ASR). The ASR aims to be a center of excellence for independent discussions and knowledge exchange. Our purpose is to improve the quality of African energy regulation and policy. This podcast will bring together energy experts and emerging energy leaders to discuss current topics of interest for the energy sector on the African continent over multiple episodes. The first season of the podcast focuses on energy access, the major immediate challenge faced by the energy sector of many countries in Africa, we explore whether universal energy access by 2030 is possible in Africa. My name is Christine Juta, your host in this series of podcasts, I am a clean energy professional with a strong commitment to advancing universal energy access towards sustainable economic growth in Africa.</p> <p>Today, we discuss sustainable development goals 7, one of 17 SDG goals established by the United Nations General Assembly in 2015. SDG 7 aims to ensure access to affordable, reliable, sustainable and modern energy for all but is SDG 7 within reach. To discuss this, I'm joined by Ifey Ikeonu, who has extensive experience in Energy Law, Policy markets and regulation, Ifey has spent the past six years as a consultant providing advisory services to governments as well as public and private institutions in various countries in Africa, on electricity policy, markets and regulation. Prior to embarking on consultancy work Ifey worked as a regulator in Nigeria, and also served as the chairperson of the ECOWAS Regional Electricity Regulatory Authority (ERERA). Ifey thank you for joining us, and welcome to the podcast.</p>
Ifey Ikeonu :	Thank you so much, Christine, for having me.
Christine Juta:	So, my first question for you, Ifey, is Africa on track to achieving universal access to affordable, reliable and modern energy services by 2030? Or is this a pipe dream? And perhaps should the answer be differentiated among countries?
Ifey Ikeonu :	Yeah, Christine as you know, Africa remains the continent that has the lowest access to modern energy services, you know, globally. And even though, you know, certain strides have been made over the last decade or so to bridge this gap, has still remained a very daunting task. As we speak today, like we know, over 600 million in Africa, over 600 million people in Africa do not have access to electricity services. And even when it comes to, to modern clean cooking, we have numbers even

much higher gets into almost a billion people without access to modern clean cooking. So where then does that lie, you know, Africa in terms of moving towards the universal access goals, or has been set for 2030 2030? Like we know, is maybe six years down the line, basically? And is it really a realistic target, which is the question of the airbox. My take, first of all, would be maybe starting from the second part of the question in terms of differentiating among the countries. Indeed, Africa is as diverse as a continent is large, basically. So, we have differences in the world, all the way from Northern Africa, that might be a region coming all the way to Southern Africa, or the sub-Saharan African region. And the difference is really huge, you know, going to countries like South Sudan with access rates of about 5% to electricity, to countries further north like Egypt, Morocco, Algeria, that have been able to attain universal access. So, the story is not the same. So, I think I want to first of all, highlight that to say that it's not the same. And again, even in terms of progress as well, it's also not the same story, because there are countries in the region that have made tremendous efforts towards bridging the gap. When you look at Ghana, and you look at Rwanda, and you also look at what is happening in Kenya today, but largely, I think that we have challenges for most countries in sub-Saharan Africa to meet these 2030 targets of access to affordable, reliable and modern energy services. And why is this so? I think first of all, the story of course, has been the challenges with investment basically. So, we have a region where most of the utilities are still largely state owned, that is owned by governments, they are not being run very prudently. And governments obviously have all kinds of conflicting needs when it comes to infrastructure development, you know, in all of the African countries, so energy itself, as important as it is, is also struggling for resources with other equally important areas like health, agriculture, education or infrastructure development. So that is a big problem. And that is where the role of private sector comes in, in between the key sector to drive this energy transition and move Africa towards ensuring that at least we do begin to make sure that the goals or the targets of universal assets, you know, is met.

Again, in this regard, obviously, even though we have a situation where a number of countries actually have a lot of private power companies currently in operation. We have regulators in place, we've tried to put in enabling frameworks that will attract private sector, investments, still, there have been a lot of challenges in this area, a lot of challenges in the sense that I think a big gap is what I like to say, actually implementing what we have put in place as policies as legal and regulatory framework into real action, basically. So, you have countries that have put in place, good energy laws have established regulators have also put in place some of these enabling policies that ought to drive investments and ensure that we'll have the private sector participation that will help to bridge this gap. Yet, at the implementations level, there still remains a very, very big gap. So, to the extent that we have all of these challenges,

	<p>it may be difficult to obtain the 2030 objective. And maybe also to chip in here that remember that slightly energy remains a key driver for the development, that is for the economic and social development of any given country. So, what it simply means is that access to clean energy services, modern affordable energy services, is an imperative for economic growth. So, because of the absence of all of these, in a number of countries in Africa, we have not seen the kind of goods that we require to have countries in Africa achieve the best potential in terms of economic goods. So what this also means is that this also impedes on the affordability, you know, of the affordability of people to actually pay what would be described as cost reflective tariffs, which are very, very imperative as a stimulant, to ensuring that our electricity sector especially remain sustainable over the course of years, that would enable us much purposefully, it was the scope for universal assets. So, to the extent that we have a lot of poverty, you know, within the region, and perhaps there's a lot more that needs to be done to raise people out of that poverty space, to enable us stimulates demand for energy, because Africa also has lowest per capita consumption of electricity. Unlike all commodities, the more it is consumed, then the cheaper it becomes, and the more it also helps to drive development in other sectors. So I think that's the energy sector must be looked at, collectively, you know, within the economic development of all of the countries, especially in Sub Saharan Africa, if governments realize the very important part that energy plays in stimulating economic growth, and really focus on ensuring that we do more to build up the electricity sector, the energy sector, what that also does is that it's provides for more economic empowerment gives people assets to more funds to more disposable income to be able to consume more and also to be able to do the sector.</p> <p>So, in a nutshell, are we able to reach this by 2030? I think yes that for some countries, it will be possible. But I am not very optimistic that as a continent, that all of the countries within Africa would be able to reach the universal assess goal by 2030, because of some of these reasons that I have discussed here, and of course, others, which perhaps time will not allow us to elaborate upon, but just add that it is important that regardless of whether we meet it by 2030, or maybe shortly afterwards, focus, strategic planning, and ensuring more importantly, that we implement all of these plans that are put together are critical in ensuring that we create the governance space and ecosystem that is required to ensure that we can indeed, at some point in the nearest future, attain the target of universal access to modern energy services by all in Africa. Thank you.</p>
Christine Juta:	Thank you very much Ifey for that in depth and realistic take on what really, it entails to achieve this insurmountable task that is facing African

	<p>countries are faced with. And also, just pointing to the importance of a holistic approach to tackling SDG seven, in order to ensure that we are able to meet targets. My second question for you really wants to zero in on the specific targets for SDG 7. As you are aware, SDG 7 targets to achieve universal access to energy, substantially increase the share of renewables, as well as doubling the growth rate of improvement in energy efficiency, all by 2030, would you say these are competing needs for Africa? Are they of equal importance to Africa, and perhaps which of these is more difficult to achieve?</p>
<p>Ifey Ikeonu:</p>	<p>I'll say that the SDG 7 targets, you know, of energy, access renewable energy and energy efficiency, in my view, are really complimentary targets, and they should work together to solve the huge energy needs we have in Africa, I don't really see them competing, but more like complementary. And like I said, with Africa, having the lowest access rate to energy in the world today, achieving a universal access would of course, include using different sources of energy generation. And for us, as a continent, you know, we are blessed with, you know, numerous renewable energy resources basically. And indeed, when you look at our solar potential, for instance, Africa, you know, has potential to generate about 60% or more of the solar potential we have globally, just coming from one continent. So, what this simply means is that we can use this renewable energy resources to solve the energy access problem, which, again, is one of the targets of the SDG goal itself. So, what this means, again, for me, is that, we have to find a way of working in a complementary manner, to ensure that not only are we able to harness the renewable energy resources, which we'll have in abundance, so be it solar, wind, geothermal, and the rest, but even as we work towards achieving energy access, that efficiency also becomes important because right now, we have a situation where in most countries energy demand far outstrips energy supply. So, it simply means that even with the limited energy, especially electricity that is available today, there must be concerted more concerted efforts towards energy efficiency. And I dare say that parts of these three goals, I think energy efficiency is somewhat, you know, not been pushed as much as the other two goals even though I consider it as equally important, especially for us here, we are considered as a huge gap between demand and supply. So, in terms of which of these would be the most difficult to achieve. I know clearly that given the renewable energies resources we have on the continent over the last few years, tremendous strides have been made in renewable energy, more and more countries have actually began to tap into all of those resources as a way of solving energy needs, especially in our rural communities where energy access remains the lowest. So, to that extent, I see renewable energy playing a very, very important role. And I do believe that over the next few years, perhaps we'll be able to do a lot</p>

	<p>more in terms of tapping into other renewable energy resources outside of hydro that today still remains most of the resource we use when it comes to renewable energy. So, to that extent, I think that renewable energy, is like a low hanging fruit in the sense that it's really there, it's available, the resources are there, and it's very easy to plug into them.</p> <p>I also think that when it comes to energy efficiency, the biggest challenge we have today is in the area of capacity, you don't seek some money policy is or regulatory framework that address energy efficiency, perhaps in a manner that we ought to today basically, again, maybe, because I can say that there is so much emphasis on trying to focus on increasing assets physically. So, energy efficiency, I think, may ultimately be the more difficult of the three to achieve. Maybe because in terms of priority, it may be considered maybe, well, I don't say less important, but not as obvious as energy access and as renewable energy, given the fact that renewable energy itself is also part of the kind of resources that you use in dealing with the energy access challenge, basically. And of course, with all of the challenges in terms of climate change, and the needs to mitigate CO2 emissions and the emphasis on actually using cleaner energy resources. So much focus is being done in these two areas. Energy efficiency, like I said, hasn't gotten that much attention. I do not think it will be difficult to achieve, perhaps if a lot more focus is given, you know, on energy efficiency over the years. So, I don't think it's more like difficulty in achieving it's that more or less that is being somewhat neglected amongst these two other goals. But I think that it's really an area that there is need to focus more on because remember that we have challenges in the region in terms of high costs of work. So of course, we are talking about energy efficiency, this surely would help in reducing oil imports is going to help in the reduction of existing infrastructure. And most importantly, I think, on the issue of affordability, because I could say that we come from a region where disposable means of income is highly limited so we have to find ways of promoting energy efficiency as one of the fundamental goals so that holistically, we are able to do an attendee as the SDG 7 goal. So again, all of them very, very important, all of them are achievable, but I will just say that we haven't done as much in the area of energy efficiency, as perhaps we've done in the area of renewable energy and also in energy assets.</p>
Christine Juta:	Thank you Ifey, so far, we have spoken about the goals of SDG 7, how we are we faring as the African continent in attaining these and perhaps what are the considerations for the different targets that SDG 7 sets. In your view, how can energy regulation and capacity building in energy regulation help in achieving these goals?

Ifey Ikeonu:

I think on the line, a lot of the challenges we have when it comes to implementing the SDG 7 goals is the issue of governance. And recall that when you talk about regulation, it's all about governance. It's all about putting in place the enabling framework that would not only support investments in the sector, but would also ensure that both the end users, the government policymakers, as well as the private sector practitioners, who are part of growing the energy sector feel sufficiently satisfied with where the sector itself is progressing. So, what this simply means is that when people come into a space to invest in the energy sector, whether it's electricity, whether it's clean cooking and the rest of it. The first thing or the first question that usually will be asked is what are the enabling legal or regulatory framework for the sector? Is there a regulator in place, who would say serve as an impartial referee in terms of any disputes, or the rules of the sector are clearly specified in regulations in rules and orders that can clearly be seen. And again, in a sector where we usually have a lot of participation from state owned enterprises, will the rules of the game be fair, is there a level playing ground for all of the participants, whether they are privately owned or publicly owned companies? So that is where regulation comes in.

I remember again, that we have talked about issues of tariffs, cost reflective tariffs, it is really the regulator who has a role of ensuring that you put in place cost reflective tariffs. And also, for instance, working with governments in terms of putting in place subsidies for vulnerable customers or customers who may be on the lower end of the rank and may not be able to afford access to electricity. It is also the regulator who would ensure that you put in place the quality of service regulations that are required to make sure that service delivery is optimized, and also protect the service providers by ensuring that the end users also pay a fair cost for services provided. So that is why I think that the role of regulation is really, really important if we're going to achieve the SDG 7 goals. You need the regulators, to ensure that you bring investments into the sector, we need the regulators to ensure that even when people are participating in the sector, that the rules are clear, and that they get a fair return on their investment. And that's the end users also have access to affordable and reliable supply of electricity. We also need the regulator to ensure that even for those who are vulnerable and may not otherwise be able to afford electricity or access to modern energy services, there are government policies that are put in place to support those kinds of customer. And you know, this brings me into the realm of capacity building, because a knowledgeable regulator is the one who has sufficient capacity to understand the dynamics of the entire sector. If you recall, at the beginning, I said that the energy sector cannot be treated in isolation. So what it simply means is that there are certain cross cutting issues that need to be clearly understood by people who have been called upon to serve as regulators in order to provide the kind of

	<p>effective and efficient regulatory interventions that would be needed to bring in the resources and to sustain the sector to ensure that it continues to grow and continues to provide the kind of the kind of catalysts that will ensure that will drive economic growth within the entire country.</p> <p>From experience, you know, having worked as a as a regulator first, and having spent the last few years working with both government ministries or regulatory Commissions I see clearly that there is still need a lot of gap, you know, in terms of capacity, especially as we bring the regulatory commissions This is obviously not very surprising, because electricity sector or energy sector, regulation in Africa is still new, you know, it's still not evolved in a number of countries. We have countries, lots and lots of countries that have probably had their regulatory commission setup in the last five years, basically. So, what is happening is, is that there is a debt of capacity. But again, conversely, there are also other countries that have had their regulatory commissions much longer have built capacity, have built experience in both areas. So, for me, capacity building is very critical, because you cannot regulate a sector if you do not understand clearly how that sector functions. You also need to be very, very up to date in terms of all of the emerging technologies and changes in the energy sector. Today we're talking about hydrogen electric vehicles, battery storage, things that were not discussed in the last 10 years. But all of these play a very prominent role especially in the energy sector. So, knowledge is important and not just a one-off thing. I think that continuing education, especially for regulators is very, very important. And likewise, let me not also just in for the regulators in the utility operators for the ministries, and for all people who are involved in the energy sector, the emphasis I have put on regulators simply is because generally, you know, it is the role of the regulator, to oversee the sector. So more than any other person, that capacity is required, but it must be across board, it must have utility practitioners who are constantly trained, we must have ministers who are responsible for certain the policies and the laws are also on the same page when it comes to capacity building. So yes, I think that the role of regulation and capacity building is indispensable when it comes to attaining the SDG 7, especially in Africa today. Thank you.</p>
Christine Juta:	<p>Thank you very much Ifey for really placing emphasis on the importance of regulatory governance issues, in order to create as you put it, a level playing field that will allow private investment to flow to complement efforts by African governments towards attaining the goals of SDG. Seven. And importantly, as you say, there's a need for continuous capacity building for regulators especially in because on the other hand, regulatory entities are fairly new in some African countries, but also because of the evolving nature of the energy sector and the rapid pace of innovation, especially in business models and new technologies that</p>

	are emerging, which have implications for how approaches to energy regulation. So there's definitely a need for that continuous capacity building. Thank you very much Ifey for your contributions.
Ifey Ikeonu:	Thank you so much, Christine, for having me.
Christine Juta:	Our second guest for this episode is Victor Otieno, an energy access research associate at the World Resources Institute (WRI). Victor, thank you for joining us, and welcome to the podcast.
Victor Otieno:	Thank you so much, Christine, for the invitation to participate in this podcast and impactful discussion.
Christine Juta:	Okay, so, I mean, we've listened to the submissions from Ifey Ikeonu and I want to hear from you, Victor, given that average energy consumption per capita in most African countries is well below the world average. How is this impacting on the expectations of young generations regarding their future? Do you see any encouraging developments or initiatives that can motivate young African people to hope for a better future in your perspective?
Victor Otieno:	<p>Thank you very much Christine for the question. Yeah, I think that's a very important question. In the context where we are sitting as Africa, maybe we can start from the point of view of what energy consumption per capita is just basically, not going into so much detail is, can be understood as a measure of how much energy country uses per person, the energy that the country consumes, divided by the adult population. So that would give us a rough estimate of how much a person receives and that's what we refer to as consumption per capita. So, you are right as indicated that Africa really falls so much below the world average. Actually, as Sub Saharan Africa (without including South Africa) is around 180 kilowatt hours per person annually, that is really, really low. And if you compare this with countries that have developed, for example, US is 13,000 kilowatt hours annually and European average is around 6,500 kilowatt hours annually, then we are very, very much behind.</p> <p>So potentially, yes, some of the causes for this might include our low energy demand, because it's what we consume divided by population. So, it means that we consume little and this might relate to things that include energy access and our disposable income. And in the energy access is that also lack of energy, which is sufficient to stimulate productive uses. Because energy is an input of development that speaks negatively to our situation, as Africa and has yields, that's really negative because a low economic activity would mean, low jobs would mean low income. But with that said, that is poised to change because there's a lot that is happening, our population is growing, our economic activity is also increased increasing, and therefore our demand for energy services would also be able to increase along with it. And just to add a little bit, I</p>

	<p>think, what is happening currently, in this space, as far as the future is concerned, the energy access side of things, not adding to the definition majorly is whether connected to electricity, for example, in this case or not, which does not give us really a good picture of what's happening. So, there's a lot of activities that are happening, trying to redefine what energy access means. And the major thing that I'll pick is energy access would mean access that is sufficient to stimulate economic activities, especially on the side of the productive uses. So, beyond the household, the energy access should also focus on the productive uses and this a lot that is happening that area, especially, maybe just a few examples Beyond the grid fund of Africa, is supporting productive uses, that is powering renewable energy opportunities. There's also Energy and Environment Partnership Fund up Africa. And even at WRI we are working with partners to come up with energy productive use fund, so that we'll be able to stimulate economic activities around that, at the same time, increase income and also increase our demand for energy. Beyond that, even the multinationals, development banks, like the African Development Bank is not left behind, through the Lighting up Africa. There's a lot that is happening, so we should not lose hope, even though our situation is still low. But there's a lot of activities that are happening, that we're able to open up the space and it is now upon us, those who are still young, because these opportunities will target more, the youth, will target more women. So, we should package ourselves and prepare ourselves to tap into these opportunities and be able to drive the economic escalation of our countries Christine.</p>
Christine Juta:	<p>Thank you very much, Victor for really placing emphasis on the importance of productive uses of energy, which I think is very important, particularly given the significant demographic of youth in Africa and the expected growth of this population. I think it's going to be quite critical for the future of Africa and for our sustainable development. I'd like to think our guests Ifey and Victor for your time and insightful contributions, and I hope our listeners enjoyed this episode of a sustainable energy future for Africa. If you'd like to listen to more episodes, or find out more about the African School of regulation, visit Africanschoolofregulation.org</p>