African Infrastructure: The CEOs' Vision

Africa has the benefit of abundant natural resource, and it also has a vibrant and entrepreneurial business culture. A lot of the potential however, remains to be tapped and the most recent pandemic has laid bare the vulnerabilities of African economies and particularly the gap in infrastructure. AfIDA is fortunate to count several leaders of African infrastructure sector on its Board, and amongst its members. Earlier this week I had the pleasure of hosting six Leaders from some of the most prominent institutions, funds and service providers active in developing, financing and investing in private infrastructure across the sector. They shared a frank assessment of the opportunities, challenges and the way forward for African private infrastructure industry. They are respectively,

Samaila Zubairu *President and CEO of Africa Finance Corporation*,

Kim Fejfer, *Managing Partner and CEO of A.P. Moller Capital*,

Andrew Johnson, *Founding Board Member of AfIDA, and Founder and Managing Partner of Climate Fund Managers*

Mohan Vivekanandan, *Group Executive Development Bank of Southern Africa,*

Oliver Andrews, *Founding Chairman of AfIDA, and founder of Tocam Capital,* and

Martin Kavanagh, *Partner and Co-Head of the Africa practice Group at Herbert Smith Freehills*

The following are extracts from this very interesting discussion, and I encourage you to listen to the full podcast or watch the video at www.afida-africa.org. Take part in our short survey, and respond to a puzzle for a chance to win a bottle of 15 year old Macallan's Whiskey. (more details on the last page). Or nominate a charity of your choice for a donation of $ 200, and runner-ups will be invited to participate in a pod-cast round-table. Vivek Mittal, CEO AfiDA (info@afida-africa.org)

The Opportunities and Challenge of African Infrastructure

Vivek: *Good morning gentlemen. Samaila may I invite you to kick us off with some initial comments on what your priorities are, what has worked, what has not work, and what we can look forward to in the African infrastructure space.*

Samaila: Thank you very much. AFC was established as a multi-lateral financial institution to focus on providing solutions to Africa's infrastructure deficit, by developing and financing infrastructure, natural resource and industrial projects that enhance the productivity and economic growth of African states. This morning I would like start with energy. Africa has significant energy deficit, and this should probably be the most significant area of focus, given the great impact energy has on development. By most estimates, we need to invest around $ 50 billion per year in energy across the continent. And we are not investing nearly as much. In fact, we know that of all the people without access to energy in the world, two-thirds of them are in Africa. There are also opportunities, as 45 African countries have committed to the Sustainable Development Goals. Renewable energy on the Continent could grow from 1% to about

16% by 2040, based on all the targets countries have announced, and we are looking at how best to support this transition.

We are also considering metals and minerals needed in this energy transition. The minerals and metals required in electric vehicles and their batteries are in Africa. I am looking at how to enhance the production of these in a sustainable way. We want to promote value addition and beneficiation of Africa's resources. Taking this theme further, one of our special economic zones, is already looking at producing electric motorbikes, as part of the whole program to reduce carbon dioxide emissions on the continent. This is a small start, but something that we continue to build on, by leveraging the energy transition to increase value addition and beneficiation of Africa's rich mineral resources.

Kim: Africa is abundant in minerals, oil and gas, and the largest producer of Agri-commodities such as cocoa and cashew nuts. It is also abundant in natural resources - Africa has 60% of the world's un-used fertile soil. This is a great opportunity, and Africa has a population of 1.3 billion people. They are young, they are eager, positive, willing to learn, which makes up a productive labour force and a growing middle class. Africa has 12% of the world's population, but only 1% of global GDP. So a lot of room to grow, and actually six of the world's Top Ten fastest growing countries in the world, are in Africa. Of-course lack of infrastructure is a big constraint. Effectiveness of transport infrastructure is another area of focus. Infrastructure Consortium of Africa have assessed that transport costs on the Continent constitute 30 to 40% of the cost of goods and that is much higher that in more developed countries.

Andrew: I think I want to start by going back to the essence of infrastructure - *What is it there to do*?

One - it is a necessary component of trade as a supporter of trade, and is vital as a basis for economic growth.

Point number two – it creates and supports livelihoods. There is more to the physical asset than what it actually does, in a quantitative and qualitative way - as a public good and sustainability around that. We look forward to nine billion people, a lot of them in emerging markets. We go forward another 20 years, something like, the 10 biggest cities in the world will be in Africa. So the way people mix, the way people mingle, the way societies grow and ebbs-and-flow are fundamentally changing not only in position, but also in their scale.

The third is that it represents an interesting investment class for certain type of investor, for its fundamental characteristics of longevity and predictability. What does an attractive assets or an attractive investment actually mean these days, in a world of negative interest rates? In a world where we all appreciate the enormity of the challenges are such that a single pool of capital is probably not sufficient to solve that problem. Ten years ago, you probably wouldn't have got this aggregation of sources of capital and deploying capital all talking with a common voice. So the ability to mobilize different types of capital from different places is quite fundamental.

And if you look across the three characteristics, the way the world is trading, and evolving will continue to change. There is are profound dynamics like digitization, like climate change, energy transition [in response to Climate Change], and the difference between tangible and intangible assets which are influencing these roles of infrastructure. This is just the way the trade is now operating around

AfIDA
AFRICA INFRASTRUCTURE DEVELOPMENT ASSOCIATION

the world, and it will continue to do so, and the role of infrastructure has to change and modify accordingly.

The other thing we recognize is that we are really on the front end of development, tomorrow and the day after tomorrow. What we do requires us to get ahead of what happened yesterday and start creating new products, new projects, new relationships, in a new way, which elegantly is why we all on here. So the Role of AfIDA, as an African infrastructure developers association, is absolutely key, and that we've got it going to take our collective resources and lean into developing a new tomorrow.

Political models are needing to change to make decisions today which are going to have multi-generational impacts. The decision taken today regarding things like energy transition will have impacts far beyond the lives of people taking the decisions today. You need a new political model and new decision support systems that go with it.

Oliver: I also passionately believe that you cannot have continent that the kind of resource it has, and yet, we are only 1% of global GDP. So therefore, something is wrong somewhere so that goes to the heart of also what Samaila was saying before. Which is, how can we improve execution and utilizing of these resources. And can we get a better share of the global trade in copper, the global trade in Iron, the global trade in gold. It Is not going to be selling our primary produce, but actually then having some kind of beneficiation within the continent. That requires Power, that to in the right quantity at the right time. So you see the circularity of the approach that I am talking about. In addition, how can we use this [development] for the same countries to make sure their forests, mango groves, etc. are looked after properly? Can we raise facilities today using their mines, and generate some carbon financing?

On the COVID Crisis

Mohan: One of the additional themes we are seeing is that African governments are facing significant amounts of fiscal stress, both here in South Africa, but really throughout the continent. I think it was happening even before COVID and certainly, during this last year it has just gotten that much more challenging. What that means is, it is creating more investment opportunities for the private sector to step in, which is a good thing. And hopefully this a trend that African governments will seize upon, and will promote even more. I think we are already seeing it happening in energy generation, and we are seeing it happening in certain specific transport classes like ports and airports, and also in the telecommunications sector – where the private sector has already taken a lead. We look forward to supporting this trend throughout the continent. Another opportunity we are seeing is in social infrastructure. We are seeing opportunities in areas like private hospitals, for private provision of education, including student accommodation, and also now, even in social housing. However, at the same time we are seeing, certainly during the period, there has been a pullback of private capital being deployed into Africa into African infrastructure. So I think, it is created an even greater role for Development Finance Institutions (DFIs) like ourselves.

Martin: Many challenges exist, the same ones that we've been facing for decades perhaps. **Macro economics** – the outlook is even worse now than it been over recent years, with negative GDP growth and so on. the consequences of the Macro eocnomic situation has been the need to save money, and that has driven, I think a lot of what we've seen around protective government action across the continent.

Oliver: In this post pandemic era, I think, there are areas of genuine opportunity. If we can grab them. It requires, I believe, for us to rethink and redesign our approach, to developing particularly new perspectives on infrastructure development. From what I have heard, and what I know, my colleagues are working on these things.

Mobilizing Capital at Scale

Samaila: Related to this [gap] is the mobilization of capital. If we are looking at the investment requirements from 2020-2030, we still need to spend about $160-170 billion p.a. on infrastructure, across the continent. While the spend has increased in recent years, and there is annual investment of $ 100 billion in infrastructure across Africa (2018 and 2019 number), there is a gap. Most of this money is still coming from Government spend, and there is a gap of $ 25-30 billion p.a.. While the investment rate from the private sector has increased, there is room for this to grow further.

Mohan: Okay, another key point to keep in mind is the continent is investing about $100 billion per annum into infrastructure per the Infrastructure Consortium for Africa Report. That is about 3.0-3.5% of GDP. It probably needs to be closer to 6-8% of GDP. So we can argue that it needs to be twice as much as we are. We can see the investment themes that are out there, there is digital infrastructure, the role of trade and, including the African Continental Free Trade Agreement, and the need to unlock infrastructure in renewable energy, opportunities in green buildings being another one be driven by significant population growth and urbanisation, and also social infrastructure.

Risk Perception of African infrastructure projects

Martin: One deal I worked on recently, [a large] Mozambique LNG project. It is an offshore project with several offshore sponsors, with products being sold off-shore, and there was no problem raising many billions of USD to develop that project. And yet, as soon as you bring things onshore the complexity and the difficulty are higher. What is the difference between, why one can raise that much money that easily relatively quickly for a large offshore energy project in Mozambique, but smaller onshore projects are much harder to develop and finance?

'ALARM' is the Solution

Vivek: if we want sustainable infrastructure for ALL in regions like Africa. There needs to be a combination of '*Localisation*' (and several of you have talked about this), local content. '*Aggregation*' is another thing that the, at least the DFIs and MDBs talk a lot about, and '*Risk Mitigation*' as such as a whole. Now, if we arrange these letters, they sound the acronym ***ALARM***.

Sustainable Infrastructure for ALL = Local content + Aggregation + Risk Mitigation

There is a bottle of 15 year old Macallan's Scotch Whiskey from AFIDA, for anybody who can come up with a better acronym during the course of this call.

If I may invite each of you to reflect on a few of these themes.

Risk & Reward Balance

Vivek: *So on the balance of risk and reward, we often hear of international private capital saying that they find that the African infrastructure risk-and-return balance is not appealing enough, and equally there are Governments, who are struggling to keep up with their obligations, they are paying a large premium to investors and are being left with a lot of risk. Recently there have been objections to take-or-pay obligations - even being referred to as 'evil' and 'offensive to the mind'.*

Oliver: This is an important issue. There is a study by Moody's on this subject. Lets look at the metrics, and then let's look at the risk of let's look at how African infrastructure compares to other parts of the world in terms of default rates. Because you see, perception is one thing, and there is going to be this perception for a long time to come. However, we will find that the numbers and the analysis just does not support this perception. The second point I want out when we talk about reward – Kim worked in America for a long time, and there are others who have led companies outside Africa. They should tell the world how profitable business in Africa is. I debunk the idea that risk is higher in Africa compared to other countries, and there are industries in Africa which offer super returns. Mining is one – ask any trader. Having said that, African Governments don't make it easy for us to make that argument. Some countries want to change the nature of contracts they have entered into – such as take-or-pay provisions. These headlines get picked up and reinforce the perception of risk. We take the point.

Samaila: I think this is very important topic to discuss. We have to put out there, actual data on the attractiveness of infrastructure as an asset class, in Project Finance and in Africa as well. The Moody's report, which Oliver mentioned, is an independent assessment of unrated bank projects financing from around the world. As per this report, Middle East (3%) is the only area which has a lower default rate than Africa (5%). Africa has the same default rate as Western Europe (5.2%) and less than the global average default rates on project finance. Latin America is clearly above 12%. North America and Asia are higher as well. These are facts. So when people talk about this blanket risk perception of the continent, it is not fair. This is something we have to put out there if we are to get any change. One way to mobilize more private capital is to see how we can make more innovative use of insurance. Since this perception of higher risk is there, and we cannot simply talk them out of this perception. Let us show them. Let us demonstrate to them through insurance, that indeed African infrastructure is not as risky. We are developers and de-risking infrastructure investment is key to our work. We should consider using insurance as a key instrument towards this.

Kim: Any business is about risk. Risk is actually how one creates value and how one makes a return on investment. Amongst the big risks, we have macro risk, business risk and political risk. And the companies who are good at managing these risks will earn a good return in Africa. The A.P. Moller Group, that we are part of, has been doing business in Africa since 1910, when the first vessel sailed into Africa. We have container import & export, inland logistics, warehouses, and the Group employs 11,000 people in Africa. For us, in Africa, the key is to find and create good long-lasting partnerships, joint venture partners, with banks, lenders and others with experience on the ground, who can complement us in terms of technology, capital, government relations. This is an effective way to minimize risk. Then, to be successful in Africa, we believe in being on the ground, to roll up our sleeves and work alongside our partners. It

is not a good idea to run investments in Africa remotely from Paris, London or New York. So that is the way to translate, great ideas into reality.

By way of example, as of last week, we announced our latest investment, called Lumika Renewables. They provide hybrid-renewable energy solutions to industrial customers. Based in South Africa, they will also serve customers across Africa. Our partners in this venture are the South Africa listed company Reunert. We expect to create a lot of value by providing reliable green energy at cost effective tariffs to our customers. We also have a great joint venture with the Africa Finance Corporation and Olam International Limited in ARISE Ports & Logistics. Here we are building an end-to-end ecosystems of supply, or transport solutions. And this will enable trade in the local economies where we will participate and hopefully, in return, also enable volumes and local processing.

Mohan: I think this discussion around the risk and return is a very interesting one. However, I have a slightly different view to some of my colleagues here in that as much as it is true that the default rates in the Moody's are low for African infrastructure loans, they are low because of the highly structured nature of these project. To get that project to a bankable stage on the continent is going to take much longer and more instruments than say in a different part of the world. This structuring works, and hence why we have lower default rates than projects in different parts of the world. One of the reasons an investor is going to require a higher return, is also due the amount of the time it is going to take, and the size of the transaction. So they are not always able to operate at scale. And I think one of the challenges why that entities need this higher return, at least at this stage is, it is also the amount of time that it is going to take and the size of the transactions is such that they are not able to always deploy at scale.

Andrew: I think [an investment] has got to be attractive to the investor. It has to go to higher return or lower risk. And sometimes I think we get a little bit confused by defining infrastructure as a single general asset class. On the one hand you might have a hydro asset which will last for 35-40 years, and other you have digital infrastructure, which will last for five years. So that the useful life of that infrastructure should then define the type of funding it procures. This is critical as the biggest issue around risk perception is how long you are locked in for. The only reason you have trillions of dollars sitting in negative interest rate accounts versus 15% for infrastructure in Africa, is because you cannot get out. If you could offer them a [credible] exit, then we get more money to flow more vibrantly in that direction. So, my point being, in addition to some others idea of the creative use of guarantees. We need to aggressively explore aspects of liquidity. If we can make the asset class more liquid, investors will come in more willingly, because the risk perception of the investment will be much more different.

Martin: Andrew spoke about making infrastructure an attractive asset class. infrastructure is an attractive master class in lots of geographies in Europe, in North America, in Asia and Australia and so on. What makes it an attractive asset class for investors to bring in that secondary money? It is certainty and the expectation of cash flow that comes out of infrastructure. The difficulty we have when we are trying to put together projects on the continent, is the difficulty of finding that consistency of structure. Nobody sets out to make it difficult to develop a project or for it not to be profitable. Nobody who develops a power project for example, wants to take money for power they are not delivering. People always know that is not sustainable in the long term. Yet, it keeps happening, and governments continue having to pay under deemed energy or take-or-pay arrangements for power they are not using. [And] The reality is there are often changes in in regulatory and

legal structures. There are unfortunately regular failings of government to deliver their deliverables, meaning the value of private sector contributions is not seen by the public.

Role of Governments

Kim: Another point is that people try to avoid doing things with governments, and they want to do private deals, and such deals are seen as safe. And I think this is a little bit what Samaila was talking to. I think it is important that we that we need public finance and we need private finance together to get development going in Africa. It is for governments to deliver frameworks which work. It is for them to clearly articulate key trends, the demographic developments, urbanisation, trade, technology and eco-system. And then there has to be a Master Plan, which the private sector can relate to. There needs to be clear legislation. Privatisation, and fair understanding about what a fair return means. It is however, for the Private sector to create greenfield opportunities within this framework.

Mohan: Let me maybe share a real world example of what DFIs and government can do to reduce this risk premium, with reference to the South African renewable energy program. Another way of thinking about the return is by looking at the cost of power. In Rand terms, solar PV tariffs have come down from ZAR 2.70 per Kwh to now around ZAR 0.70 per KWh. Again on wind energy down from ZAR 1.15 to ZAR 0.60-0.70 per KWh. Obviously there is an element of the cost of capital good which have reduced significantly over the last decade. What has also come down is the return expectation on both the debt side and the equity side. Being part of a competitive process, investors have had to reduce their return expectations. What we are seeing is, because Government was able to provide some consistency and ran a transparent process, and the DBSA provided support and funding to the Government to establish an Independent Power Producer Office, to given them the technical skills, including advisors, to set up this transparent process. Already the Government has successfully procured 6000 MW of renewable energy. Going forward the twenty-year Integrated Resource Plan has articulated 2600 MW per year of new renewable energy for a number of years. So, this process has reduced the risk premium, and it is now also being done at scale. The question now is how do we take this experience from one sector like renewable energy, and replicate this in thermal generation or other sectors and other countries. In South Africa we are applying this to municipal broadband, to student accommodation, hospitals and social housing, private build, design and operation of municipal water and waste treatment works. Every sector is different and one has to apply it differently. But the point being, it is the government, which can bringing together the different departments, and then listen to the private investors. But obviously, we really need to see South Africa doing this in other sectors, and other countries doing this as well.

Martin: for me that the question of take-or-pay has become quite emotive, and it kind of links together a whole lot of dis-aggregated issues into one fairly emotive lightning rod. The key thing certainly from a lawyers perspective always is, if I am talking to governments, unless you've got a whole lot of investors lined up who are willing to invest without any form of guarantee as to return, it is a pointless conversation. In most places you need to provide some sort of demand (and revenue) guarantee if you ask the private sector to invest and lenders to fund.

One thing that we are saying is Governments have got to put in place a stable platform. A stable platform is legal stability, it is regulatory stability. One wants investors to understand what the overall plan for the sector is. It is interesting that Kim has mentioned the idea of a Master Plan that gives investors a level of certainty and clarity. It would be impossible to even finance a power or an infrastructure project in (e.g.) the UK, without a certainty as

to what the revenue stream was, and whether they are going to be able to access that throughout the term of the contract. And yet in Africa people continually expect that, by asking people on either side, on the government side or on the private sector side, to make the leap of faith. For me that is unreasonable. it is unreasonable expectation on governments, an unreasonable expectation on lenders and on the private sector.

Oliver: I agree with Kim and Martin whole heartedly. Honestly, I think Governments will be well served, if for every sector they had a Master Plan. If you give investors a 5 to 10 year plan, it will give them a degree of comfort and degree of certainty, that this is the policy. This helps the private sector, and it also helps the Government. From the Treasury to the Energy Department to the Justice departments, to all focus on this policy and support this policy. Today in most countries, we as developers spend time managing and help different parts of Government align their own coherent thinking.

Innovation and the Role of DFIs

Mohan: As a Development Finance Institution (DFI) we primarily support either public institutions, such as state owned entities, utilities and municipalities, providing them with long term capital. But we also work in project finance structures working with commercial banks, other DFIs as well. We also see the importance of helping developers working through the feasibility lifecycle. We are not a developer ourselves but, we love to work with strong developers, both public and private, in providing them with risk capital in the earliest stages of project development, to get some of those projects through to the bankable phase where we ourselves can participate again as lenders.

Samaila: To follow-up on the idea of using more insurance. European and US DFIs and countries have an aid budget for Africa. We should be working with them to use part of this budget towards a first loss tranche of such insurance products. This should help reduce insurance premiums. If you look at non-payment [credit] insurance premiums for Africa today, they can range from 2.0%-3.5%, which is too expensive. With this first loss from DFIs, insurance premiums may reduce to 1.0%. At that level, we can unlock demand for capital, and make these investments attractive for traditional deep-pocketed international investors who are faced with low or even negative yields in their home markets. The gap of $ 25-30 billion of investment per year is a lot of money. However, by doing this, there is a lot of scope for a broad securitisation programme. I think this should be our core focus going forward

Martin: There are, I think, lots of clever structures coming in. I am working a fantastic deal in Malawi at the moment called Mpatamanga which is a nearly 400 MW hydro project being developed. We are actually on the government side there. And as you can tell 400 MW of large hydro in Malawi is a fairly chunky proportion of Malawi's GDP. This is an interesting structure because the IFC is helping the government as co-developer. [As part of this] they have funded a whole lot of advisors, including us, to advise on the government side. That is a way of upscaling a Government's capability.

Oliver: The [DFIs] should really look again how they can use the capacity of the private sector, with the public sector money and marry those two together to deliver African infrastructure. The policies of some of them – ignoring some critical sectors.

Aggregation

Vivek: *The idea [of Aggregation] is to club tranches of capital or projects in different countries together. Where we are at the moment is; a large part of the gap is due to the fact that many countries in Africa, still have not*

got off the ground in terms of getting private investment.__Many countries are not large enough, and they do not have large enough pipelines of projects to justify the detail work that is required to set up the sort of transparent, consistent and consultative process Mohan explained earlier. About nine countries in Sub Saharan Africa and, two, three, in North Africa collective have 90% of all that private investment - about $130 billion in total over the last twenty years. What the effective ways of aggregation?

Oliver: On aggregation, I am delighted by the work A.P. Moller Capital are doing, and which AFC has started sometime back now, and taking Kim's point of putting things in a platform company. Two things that come to mind to me, - you can actually have replication effect. When you have developed a free trade zone in one country, you can now take it to the next. Like we have done in Togo, and taking it across to Gabon. You can have multiplicity of staff, you can train them and move them around. From an exit point of view, you are much more attractive from a platform point of view, than with a single project.

I have taken up a particular focus on mining and, and I think the reason I chose it is that first and foremost to do mining properly, one has to have supporting infrastructure. in the mining sector in Africa, is that we need to drop dependence on diesel. And the great thing is this, [if] we put up an infrastructure like that, it can provide support to the community. This underpins all my approach. I wanted to move into this community social investments. So if I was to bring in power. As you just indicated Kim. I'll be looking to see how I can get to the villages and towns that sit in close proximity to that, so that they can share in this common good. Using one anchor, or one project drawing these other facilities for the common good of the community.

Martin: I think there are increasing opportunities for aggregation, so cross border interconnector project we have recently worked on, the BOSA interconnector project, between Botswana and South Africa, which is a useful model if you would like to increase the size of both markets. Another project we worked on is the Zimbabwe - South Africa border post at Beitbridge. That is an interesting one. Not only is it aggregating South Africa and Zimbabwe, but it is more than a border post, because it also frees up routes of trade and develops communities around it as well.

Andrew: There is definitely an aggregation role to play but depends on how you slice and dice it. Traditionally it is sliced by geography, because of this assumption that the counterparty from a risk perspective, is the sovereign government. Therefore, the primary risk is take-or-pay on the Sovereign. If we can break this and put the reliance of credit on the society it [the project] serves. So, disaggregate the benefits - mini grids, mobile banking, where infrastructure is disaggregated. I think Oliver's point of community infrastructure. Then we can start weening away from reliance on Government, and bring in different types of capital that plays certain roles. We can bring in blended finance. You may have a type of capital that is prepared to take FX exposure, more than others. You might have types of capital that is prepared to take tenor 15-30 years, and others who want 10-15 years. And you can start aggregating in a more sophisticated way. That then talks to the role of blended finance, which has enormous potential to mobilising capital. But this is very specific and there is an art to how you disaggregate and aggregate on many planes. Then you can start scaling. As you know from experience, one can get lost for years and doing a single deal, or one can do five deals in a different way.

Samaila: The Final point I want to talk about [Platforms], not only providing opportunities for projects, but also the liquidity for projects required for exits. If these platform companies are structured well, they should provide a natural exit for investors.

Local Content

Vivek: *Thank, and next please comment on local content. In addition to blue collar jobs that are nearly mandatory in all the development work that we do, focusing on goods, People (more African entrepreneurship) and capital. There is a lot of stranded capital earning those negative interest rates from Africa, that is not being used over here.*

Samaila: In this regard, it is key that members of the community have a stake in the projects that we support. Recently we supported a 300 MW power plant in Senegal Cap des Biches, and there was a clear Government directive that local entrepreneurs promote the project, and we worked with General Electric to deliver this. This project is based on using natural gas from the country, and will displace imported HFO and diesel generation, and in doing so, the project will reduce tariffs by 27%. It will reduce carbon emissions and greenhouse gas emissions significantly. Their approach to community development is [also] very innovative. Where we used to have permitting issues, these permitting issues have disappeared [with such local participation]. Furthermore, the project [has] mobilized local currency, which reduces tariff risk even further.

Martin: This is important, and there are some emerging examples. Some of you were involved in the Nacthigal project in Cameroon, where we worked for EDF, the lead sponsor. There is a very clever bit of risk mitigation on that, which we can talk about in more detail. We were able to get $200 million of local currency debt in Cameroon, which of course immediately solves some of the problems of tariff uncertainty and the problem of fixing debt in dollars and tariff coming in local currency. And there were guarantees around the refinancing of that local debt every seven years, so the mini-perm was effectively guaranteed into a 21 year long term debt instrument. By creating a world bank guarantee eventually backed by the government, making the World Bank and Government the lender of last resort and each roll over point. So that was a fairly interesting structure, and it means that you've got a large chunk of the local bank market in Cameroon invested in the project as well, so a very clever structure from a risk mitigation perspective (linking debt to the tariff currency), and which also mobilises the local bank market.

Sustainability 2.0

Vivek: *Thank you gentlemen for these ideas and thoughts. Finally, on evolution of sustainability metrics; each of your institutions have new requirements for reporting and measurement of sustainability. Do these jive with the metrics, well thought out metric and methodologies, we have been using over the last 25 years for African projects? Is there room for upgrading these in terms of measuring impact on human capital, natural capital, social capital, and financial capital?*

Kim: Our philosophy, as we say, is to *do well, while doing good*. So, we need to create a reasonable return on the investment that will allow us to do more investments. And at the same time, it is also important that we build sustainable businesses that are creating jobs. We recognise our environmental responsibility, and we want to make sure that our investments have a positive social impact.

Andrew: There are two sides to it [ESG] – there is 'do no harm', which is what the performance standards do, and there is also 'do good' what the community engagement programmes are meant to do. Now in the way we do projects finance, with defining risk, or transferring risk through EPC wraps, somewhere in the mix these tend to get lost. Whether these are responsibilities which remain with the owner, or whether these are transferred down to the EPC contractor, certainly during construction, I think this should be an area of focus. On our side, we make a clear selection criteria around how the contractor plans to manage Health & Safety. As we emphasise local content, we also

heighten the risk of accidents on site. It is just how it is. So concomitant with that pursuit of local beneficiation, needs to come a support structure. Be that education, be that policies and procedures, that deal with occupational health and safety, that sort of macro and micro subset of the broader local content component. This is an important part of what we do.

Samaila: On Impact assessments. We need to look at how we measure the impact of our projects differently going forward. And it is important because the 'S' in ESG is almost absent, from what we do. I am going to emphasize the 'S', and in emphasising the social aspects, we measure the how many jobs we have created by our initiatives. What emissions do we have – and we are going to be publishing more information about our impact on the economies in which we invest.

Martin: The thing that we consistently see when we look at these projects, is that the benefits of the projects are given effectively a zero score. No scoring is given for health benefits, education benefits, industrial benefits, growth in the tax base and so on. One starts with the presumption that the project happens on a zero base, and then we look at all of the negative impacts in terms of environmental, social impacts such as dislocation of people, effect on birds etc. When we start from a zero baseline, and all that one can do by analysing the project, is degraded until you get to a point where you decided that it doesn't pass the ESG hurdle or the ESIA hurdle. This ESG 'risk', the time and cost, would reduce if there were effective metrics for the benefits of a project would could at least be weighed against the environmental and social "costs".

The Way Forward

Samaila: I think going forward, we should look at the things we can build upon, from all the discussions that we have had today. Let us build on insurance. Let us build on risk mitigation. We can build on the mobilization of additional capital for investments on the continent. Clearly build on the metrics for sustainability. Going forward, and we can also build on the aggregation to platform companies, not only as aggregators for opportunities but also as a way of providing exits, for so investors, essentially been a market maker for infrastructure investments. At the AFC this is a clear part of our strategic intent.

Andrew: [About] the sustainability metrics. Well its key. Sustainability is central to everything. That goes to that point of whether it is a seven year asset or a thirty year asset. And the one thing we do know, which is going to affect that sustainability, is climate change - undeniably. Whether it is on the physical asset due to weather conditions, or whether it with the use of the asset due to people being relocated or misplaced, or whether it is business which is responding to climate change – such as energy transition. This for me is absolutely key. We see it coming through policy. to reporting, through insurance, through everything. That is climate. So, we've got to increasingly think of infrastructure as much about bricks and mortar, but also through the lens of climate.

Kim: For me the key to reducing the infrastructure gap in Africa is to mobilize private capital. Coming out of the COVID pandemic, the social disparity in Africa is actually increasing, more people are being thrown into poverty and we need to work to get people out of poverty. And I think the trick is to work together in the partnerships and, and then it is to really be on ground, roll up the sleeves and making sure that all the good ideas that exist become reality.

Mohan: There is no shortage of investment themes and ample global liquidity out there, that is chasing the decent yields that can be made. Overall it is a positive growth story. I think the challenges is that African governments do need to play a role in unlocking these investment themes, because the nature of infrastructure is such that, private entity can't

necessarily just go in and do it by itself. There is some private to private, but the majority of the investment has to be led by Government, and they need to be capacitated. And it is our role as a DFI, in providing a portion of that and helping African governments, unlock sector after sector, which can then allow this significant capital to flow to be what could be a $50-100 billion investment opportunity.

Martin: Just two things for me. The First a point on ESG. If there was an easier way to score the environmental and social benefits of a bit of road infrastructure, some access to reliable electricity 24/7, and without running a diesel generator in your backyard. Then one might cut through that process a lot more quickly. Secondly, regarding Insurance and Aggregation. If you aggregate them [insurance], say across 15 power plants across Nigeria, and you get a low default rate (the point has already been made) and you say there is a specific risk of default in that chain - It then becomes easier to guarantee on a portfolio basis, as opposed to an individual institutions looking at one project at a time. I think could unlock a whole lot of capital. I think this is one thing that AfIDA could take up.

Oliver: I would like to think this is what AfIDA is all about. All those years back, when Andrew and I, and others conceived it and build on those partnerships. By having such thought leadership, we are moving the conversation forward.

The pandemic has taught us how weak our health infrastructure is in Africa. When I say weak, I don't mean just hospitals. God knows we need a lot of those. But also we do not really actually have any manufacturing of drugs or any medical consumables, so we have to wait for the world to send them here. Do you know how much even countries like Sierra Leone spends on just drugs? Around about $20 - 30 million p.a.. and yet I do not see any facility on the continent. Perhaps one in Kenya. This Pandemic has laid this deficiency bare.

The other infrastructure is Digital Infrastructure. Andrew mentioned this before. This is the future. There is tremendous innovation in payment systems. How do we broaden that? What is the infrastructure needed to expand our 4G and 5G capability. How can we leapfrog like we did in mobile telephony.

Vivek: *Thank you very much all for your time and valuable insights. I will just end with a couple of plugs. One is that AfIDA now has six strategic working groups of our members covering four regional and two sectoral themes. The two sectoral ones cover Digital, ICT and Telecoms, and Transport & Logistics. The four regional ones cover East Africa, SADEC, South Africa and West Africa. And these are for addressing the issues we have highlighted today and solving problem. These fora open to everybody, and please encourage your colleagues to join these.*

Finally there is a bottle of 15 year old Macallan's Scotch Whiskey to be won by anyone who can suggest a better acronym than ALARM (as explained earlier). Please take our short survey. You may hear the full podcast of the discussion at www.afida-africa.org.

Survey: https://www.surveymonkey.com/r/FT01AfIDA

AfIDA
AFRICA INFRASTRUCTURE DEVELOPMENT ASSOCIATION

About the Panel

Africa Finance Corporation: *AFC is Africa's leading infrastructure solutions provider. We combine specialist industry expertise with a focus on financial and technical advisory, project structuring, project development and risk capital to address Africa's infrastructure development. To date, the Corporation has invested over US$8.7 billion in projects in 35 countries across Africa.*

A.P. Moller Capital: *is a value-add investor focused on financial, social and environmental returns. Being part of the A.P. Moller Group, we leverage our industrial heritage and experience to develop infrastructure in emerging markets where the infrastructure gap is most profound.*

Climate Fund Managers: *is an investment manager contributing towards mitigating and building resilience to climate change in areas most affected. The aim is to raise, deploy and manage funds for climate change mitigation and adaptation that will deliver a transformative role in the renewable energy, water & oceans, sanitation, landscapes, and sustainable cities sectors.*

Development Bank of Southern Africa: *The DBSA is a leading Development Finance Institution, which promotes inclusive and sustainable economic development and regional integration through infrastructure finance and development in South Africa and across Sub Saharan Africa.*

Herbert Smith Freehills: *is one of the world's leading professional services businesses, bringing together the best people across our 26 offices to meet all your legal services needs globally. We can help you realise opportunities while managing risk.*

Tocam Capital: *is a developer and arranger of capital of infrastructure projects in Africa, It is founded by Oliver Tunde Andrews (retired Executive Director and CIO of AFC, and Chairman of AFIDA).*