Bloomberg Green at COP28

Supercharging the Renewables Race

Abeer Abu Omar: I would like you guys to welcome my first panelist for the day, Dr. Nasser Saidi, who is the chairman of the MENA Clean Energy Business Council to the stage, please. Well, the chair.

Dr. Nasser Saidi: Here's right?

Abeer: Yes, please go for it. We have 15 minutes. I don't know how much we're going to get into, I know we spoke a lot last week about what we're going to discuss and I guess my first question is something that I had alluded to, and those are the challenges. I'm a journalist, so we love to ask about challenges to all the people we speak to. In your opinion, Dr. Raed , what do you think are the--

Dr. Saidi: Nasser. That's Raed .

Abeer: Dr. Nasser. What do you think are the primary challenges in transitioning to renewable energy in this region to mitigate climate change? We're hosting COP28 as part of the discussion, what do you think those are?

Dr. Saidi: I think Raed really set the scene and I have a wish for the Red Sea and NEOM. That is going to be the showcase for how you address climate challenges, whether it's renewable energy or other aspects. Fundamentally, I think we need to be cognizant of the fact that what you're talking about is a transformation of society and the way we work, and the way we live. The challenges are multiple. They're economic and technological, they are social and political, they are about innovation, they are about disruption. Many jobs will have to change and disappear, new jobs will get created. That's not going to happen easily.

If you're talking about renewables, you're going to have to have the land available. Say if you're looking at solar or even wind, how are you going to use that? What are you going to do about water systems? It is very much holistic and therefore when you approach the issue, you need to think in terms of what are the policy priorities. Let me start off from where we are here today and then I'll mention some of the policy priorities. The first thing to note in this part of the world, the rest of the world is talking about 1.5 degrees. We are already beyond 1.5 degrees Celsius increase in temperature in this part of the world.

In terms of the challenges and stresses, you're talking about water stress, 80% of the freshwater that we have in the region comes from outside the region. The Euphrates and the Nile are not in the region, they come from outside. You're talking about increased desertification because of higher temperatures, water rising, sea water rising, threatening many of the cities that we have. You're talking about the fact that many countries in the region don't have the resources. We are privileged in the GCC that we have the resources, you have the financial and you have access to technology, but many of the countries in the region do not. That's going to raise issues not only in the region but globally in terms of unequal access to technology and finance.

Finally, a major challenge has to do with financing. If we are going to keep to one and a half or two degrees, and I think I'm no longer a believer in what's called climate risk mitigation. Let me explain. Climate risk mitigation is what we talk about all the time. You invest in renewable energy, electric vehicles, et cetera, et cetera, et cetera. That is to say, you're trying to minimize the risks of climate change. What I see is that we've gone beyond that. We need to start thinking about climate mitigation, and that means making massive investments to your infrastructure so it becomes climate resilient, so infrastructure services become climate resilient.

If you saw what happened in Libya earlier this year, a couple of dams burst because they were badly maintained, badly designed, et cetera. Net result, 20,000 people lost their lives at the best testament. If you saw what happened in Pakistan, massive rains, 30 million people got displaced. What we're talking about is climate disasters. We are already at climate tipping points. What do we mean by that? It means that the climate system itself might turn in a way that is no longer reversible.

Climate risk mitigation is only a very small part. Even that small part, let me mention what the challenges are. The estimates are that we need to spend something like $8.3 trillion between end of 2023 to 2030 just on the renewable energy. At least 50% of that is for emerging markets. That's about easily 4 trillion. Every year you're going to have to spend 1.2 trillion just for renewable energy development.

That's not the only bit. You're also going to have to invest in power grids. It's one thing to have a power plant or a solar plant, et cetera, but you have to relate it to the grids because you have to address the issue of intermittency and sustainability of the power source and then you also have to think about how do I store it? I've got the renewable energy, I've produced it through solar. How do I store it? Battery storage is going to become massive issue. There, we're going to be talking about something like 720 gigawatts. These are massive numbers that we're talking about in terms of networks, grids, about 780 billion. These are massive numbers.

The question is, where do we get the finance from? The big challenge, I think, is that governments don't have the ability to finance that. Let's be very clear about that. By all estimates, something like 80% of the finance has to come from the private sector. The private sector will tell you, "I'm happy to finance, but where's the framework? Give me a framework. Reduce the risk."

What does that mean? It means that come back to the priorities. What do you need to do? Number one, you need to reduce climate fossil fuel subsidies across the world. Last year, the IMF estimates that subsidies, fossil fuel related subsidies and their impact was over $7 trillion. That's because energy prices were high, right? $7 trillion. We're going to have to reduce fossil fuel subsidies and convert the saving that you made from fossil fuel subsidies to investment in renewables and climate resilient infrastructure.

Number two, you have to introduce carbon pricing. Carbon pricing, not just reduce subsidies. You have to introduce carbon pricing. A carbon tax. That's about a minimum, in this part of the world, about $8 per ton CO2 emissions. Third, you have to have climate policies. Climate policies. By climate policies it means it has to be holistic and comprehensive. The UAE is one of the few countries in the world that actually has a minister in charge of addressing climate.

Abeer: Yes.

Dr. Saidi: Why is that important? It's because addressing climate is a cross-cutting thing. It affects everything that government does because you care about society, the economy, public finances, and therefore you need a climate policy, which is comprehensive. If we talk about infrastructure, infrastructure by its very nature is long-term investment, 10, 15 years, maybe even longer. Therefore, you need to plan your fiscal policies, your debt management policies accordingly. Therefore, you cannot go from year to year. You cannot go from year to year. You have to think multiple years.

Automatically, that means that if you make a commitment and nearly all countries participating in COP28 are making net zero emission commitments. That's great. We should applaud them and say, "Shukran. Thank you very much. Ahlan wa sahlan." The problem I have is that many of us-- I mean, I'd love to live much longer, but many of us are not going to be around in 2050. How do we make policy makers commit?

As an economist, there's this issue of time consistency of the policies. If you commit to a policy, will you continue committing to a policy and not change your mind somewhere down the line because there are elections happening or there's another country that you want to fight, et cetera? Look at what happened in the United States. When Trump administration took over, they reversed policies. You might make a commitment today and somebody else might change it.

Abeer: You're bringing up an excellent point, Dr. Nasser, when it comes to addressing those challenges and real physical solutions to get through these challenges. I'm just conscious of the time. I want to get a question about the region, and you've already spoken about that eloquently. We live in a region that can be quite complex. I always wonder what are--

Dr. Saidi: Let's get into it.

Abeer: How can the private public sector collaborate to address this issue?

Dr. Saidi: Two main issues. For the GCC, you are highly dependent on fossil fuels. For some countries, it's a high share of GDP, it's an even higher share of government revenue. Automatically, you have to diversify your economy to reduce the risk from the fossil fuels. In addition to that, given that you're highly dependent in terms of production, trade, and the like and government revenue, we have to diversify across all three.

That means that the transformation that is required in this part of the world is even more challenging than anywhere else because if we talk about reducing fossil fuel subsidies, it means that much of any industry and manufacturing that has been used to low energy prices will have to convert and start looking at higher energy prices. Now, the solution is to say, "I'm going to provide you with solar, wind, and whatever at acceptable prices." Change your subsidies, go into renewable, make it easily accessible. What helps you there is that the cost of technology has been rapidly reducing. Solar modules, battery prices, and all the rest are rapidly reducing.

What governments need to do is to create the framework, they need to tell them, "I'm going to help you get access to finance," and I think this is the critical bit that we need, but which is achievable in this part of the world. We're right next to DIFC. ADGM is up the road, Saudi Arabia has KAFD, and these are centers for finance. The one optimistic note I will make is the following. This part of the world, of course, is a major source of fossil fuel energy, oil and gas, and also hydrogen, because the technology is now available to us and it's going to be available at even lower cost as time comes up.

We know how to finance energy. We already do that. We've done so for the past 50, 60 years. The trick is to transfer part of that financing to finance renewable energy and clean technology. That means that our financial centers have now got to be available for listing companies, for issuing green bonds and green sukuk and blue ones if it's not green, then I'm happy to put if it's blue funds. To me, the objective is very clear. We have to be the climate finance hub of the world. I think even that is not going to be sufficient because people from the private sector are going to tell me, "Well, that's very nice, but who's going to take the risk?"

What I propose is there are many proposals for various funds, and COP28 has already achieved a lot by having a damaged fund promising 60 billion, maybe up to a 100 billion. Excellent. If you think about the numbers we were talking about, they're still very small compared to what we require. I believe that this is the time for new institutions to be put in place. I'm in favor of creating an international climate bank.

I wouldn't put it in the World Bank. I wouldn't put any fund with all my due respect for the World Bank. I've dealt as a policymaker with all the international institutions, the IMF, the World Bank, you name it and for a long period of time. This is too much politics, abd too much intervention. We need an independent, mandated, international climate bank to provide the financing. Alongside it, I would have the equivalent of the IFC for the private sector, an International Climate Finance Institute, which would also help finance the private sector. You have to be able to do PPP. You need to provide finance to the private sector. You need to invest much more in climate tech.

Here, I think, is another note of optimism, so let me come out and say it. It just happens that this part of the world has been investing heavily in climate tech. Let me give you three examples, which are exportable examples. The first one is desalination. The whole world is going to be under water stress. In this part of the world, the estimates are that by 2030, 80% of the population will be water-stressed.

If you go to Yemen today, the capital has run out of water. Desalination is going to be critical around the world to make water available to populations, which are rapidly growing and becoming much more urbanized. 50% of the world's capacity of desalination is in this region, and they're going to be adding some 37% more over the next 10 years. Desalination is number one.

The second one is district cooling. We're sitting here, you don't see any ugly air conditioning units coming out of the offices as you do in most parts of the world. Why is that? Did you ask? Most people didn't ask. That's because cold water is being piped into the buildings from a district cooling plant. District cooling is going to be

very big business as you go ahead. That's another exportable technology because you've got rapid urbanization.

The third one is desert agriculture. We import in the region, 85% of what we eat, what we consume. If you have water stress and you don't have arable land, what are we going to do about it? What you need is desert agriculture. That's a third technology which we have, which we can export to the rest of the world.

Abeer: Those are essentially the three solutions that we spoke about before. Those are your three solutions to mitigate--

Dr. Saidi: Part of it.

Abeer: Part of the solution to mitigate.

Dr. Saidi: Apart from the massive investment in infrastructure resilience.

Abeer: Absolutely. Again, conscious of the time, Dr. Nasser. Thank you so much for those remarks.

Dr. Saidi: Thank you.

Abeer: I know we can talk about this for hours. COP is happening. This is in the midst of the discussion. Just because I need to welcome my next panel discussion, thank you so much for those remarks, Dr. Nasser.

Dr. Saidi: Thank you.

[applause]

Abeer: Thank you. Thanks, everyone. Next up, our panel discussion is going to be titled Reshaping the Clean Power Landscape. I'd like you to welcome the first of my three panelists, Rehan Baig, who is the Chief Corporate Affairs, Strategy, and Sustainability at ACWA Power. Rehan, welcome.

Rehan Baig: Thank you. Lots of titles in there.

Abeer: Lots of titles. Then we have Jeremy Crane, who is the CEO of Yellow Door Energy. Jeremy, welcome. Finally, we have Nicole Iseppi, who is Managing Director of Global Energy Innovation at the Bezos Earth Fund. Please, welcome my panelists. For a discussion that we're about to start, Jeremy, I just want to bring in what you said earlier about carrying this discussion in Arabic. It's not going to be in Arabic. It's going to be in English. Everyone is going to understand this.

The first question, and I know that I'm asking a lot about challenges, but really, it's what we're facing right now. It's what everyone is asking in this COP. These challenges have existed for a while and they're persistent and we need to address them. I think my first question for the three of you, starting with you, Rehan, is going to be, first of all, how do you think you can collaborate with governments to unlock clean energy? What are the challenges that you're facing in that? How can we find solutions to those?

Rehan: First of all, thank you for having me. I think this was prefaced really well by both Raed and Dr. Nasser because they give you a context of the world in which ACWA Power is being right now. We're executing. We're actually doing a lot of these projects. We investing heavily in renewables. We're the world's largest private desalination company, and we're a first mover in green hydrogens. We are working with the finance community, working very, very strongly with transition.

Our relationship with governments is very, very strong. The first thing is obviously we're very proud to be part of Vision 2030. We're a Saudi national champion and we are essentially an extension of the Saudi decarbonization agenda. If you look at ACWA Power 10 years ago, we had next to no renewables in our portfolio, and today it's close to almost 44% in terms of our renewable portfolio. In 10 years, we've added a significant amount. A large part of this is because of the government agenda to decarbonize. We've moved very swiftly to execute these.

Renewables really is not an ideological decision any longer. It's really commercial. I think Raed talked about this. It is the smartest commercial decision. It can be deployed very rapidly, even through the throes of what we've seen in COVID, et cetera. We've been able to execute projects and they're coming online. The same thing with when it comes down to desalination or utility.

I had the privilege of being at the Red Sea two weeks ago. I've seen firsthand what we can do and what we've executed. A very, very complicated but amazing project, again, with support from PIF and the Red Sea. Same thing with the NEOM Green Hydrogen Company, which is eight and a half-billion dollars investment alongside for ACWA Power, Air products, our partners, and NEOM. We are doing these kind of things. It comes because you've got, one, leadership, the right framework, which governments have to bring, and the right financing. It's the magic mix around it. That's what we bring.

Abeer: Jeremy, Yellow Door's accelerating very fast. What are you doing? How are you carrying these conversations with other private players and governments? What would you say are the biggest challenges and the solutions to them in your experience?

Jeremy Crane: Thank you very much. It is a huge challenge. I think the context of the discussion today and the introduction was great because you hear about what the challenge is, and then I think what you're seeing up here now is people who are doing things. Yellow Door has 33 projects under construction today. Actions on the ground happening, helping businesses realize that clean agenda. When it comes to the government context and how we work with policymakers, our approach to the challenge is to say, "Hey, look, there is an alternative to the conventional way of getting energy. You can produce most of the energy needs for your business on-site, on your rooftop, in your backyard, in your car park to enable a business to make that transition, whether the policies are there or not."

For our business, what we're trying to do is help those businesses-- we invest in the infrastructure that allow those businesses to transition to a clean energy source, to a, perhaps in many of the markets we're operating, a more reliable energy source, a more resilient energy source. Then finally, and perhaps most importantly, a less expensive energy source. Our partners are saving 30% to 50% on their cost of

energy by transitioning to a clean energy source. Who wouldn't want to do that? Especially with Yellow Door, who's also making the investment for those businesses. As many others are in the market.

For us, when we look at the government barriers that we face in many places, we say, "Well, look, let's change the dialogue. Let's let the business do what the businesses do best and make a decision that's best for them." I will just add one point. We're very excited about new news in Dubai. I think there's some plans to enable greater access, allow businesses to take more of those decisions. That's just coming out right now. We're excited about that evolution.

Abeer: That's great. Nicole, welcome to Dubai.

Nicole Iseppi: Thank you.

Abeer: In your position at the Bezos Earth Fund, philanthropy plays a big part. How do you think philanthropy can be used to unlock clean energy?

Nicole: Certainly. The Bezos Earth Fund is actually a new philanthropy, and we're actually the only philanthropy in existence today globally that's focused solely on climate and nature. We're the largest commitment. Our initial endowment is $10 billion in grant funds. That means no return for any dollar, but catalytic in accelerating the energy transition. The other thing we do that's quite distinct for the Bezos Earth Fund is that we're not just about accelerating the energy transition, we view it from a system change. Meaning that we're not just looking at the needs today but we are looking at the ultimate energy system.

What is that ultimate society that we all want to be part of? What do we do now in this decisive decade to really accelerate it? Philanthropy, like anyone, we've got multiple parties. It's not just on one side. It's philanthropy, it's private sector, it's government, it's entrepreneurs, innovators. The uniqueness of philanthropy is that we are independent. We don't represent any specific government or any specific organization. We are there focused on impact and to be catalytic and to take some bold chances, meaning big bets, and really trying to accelerate it. Now, with that, that takes big risks and we're open to big risks. Now, sometimes we've got to learn some lessons, but the main thing is we learn from them and we keep going forward.

The other thing with philanthropies, we are very quick. We can make investments, we can do decisions that is catalytic where we need it. The role of philanthropy really is that we've got to recognize that the global energy industry is a live economic ecosystem and so everyone has a role. Philanthropy definitely is part of the solution, but it's not the only solution. Philanthropy is there to really hone in on what are the gaps and barriers today, and where could we use our special capital, because It's a hundred percent grant-based, to really accelerate with our fellow stakeholders and partners to really execute more at a quicker speed.

Abeer: That's great. Jeremy, I want to bring it back to you, but before that, I know that my colleague, Sarah, prepared a few charts for us. If we can see a couple of the charts that have been viewed about solar power in the Gulf countries. Jeremy, when we look at economies in this part of the world, the Gulf mainly, I cover economics and I can say that these countries are still very much heavily reliant on oil prices to

sustain their fiscal balances. That's still reality. They're definitely working to change that, but where you're based right now, how do you think clean energy can improve energy resilience in this part of the world?

Jeremy: That's a great question. Look, I think absolutely the nations of this region are built on making revenues from oil and gas. There's no question about it. I think the easiest way to express how solar fits into that is oil and gas is our great resources for many things in our lives but most predominantly transportation. If we can burn less fossil fuels in electricity generation by shifting to clean electricity, be it large plants like ACWA was doing or site-specific plants, the economies here will able to consume less on their own domestic needs. I think that's where we see a really win-win for the policy makers of the region.

Abeer: Right. Rehan, how can these governments leverage clean power to improve resilience?

Rehan: I think I touched on this. I think this is part of what we're seeing in Saudi Arabia in the UAE. You can see there's a five-gigawatt plant here in the UAE, in fact, one of them, which we are partnering would be inaugurated today. Like I said, it's not archeological. It's commercially good, it's cheap. We hold the records on energy tariffs now that we've set as Guinness World Records that sit there.

Now, some of them are unlikely in the current interest rate climate to be repeated, but still they're cheap, they're effective, and they can be deployed very rapidly. You can look at our portfolio and see how we're doing that both in Saudi and the UAE, for example. It can be done. It's just a question of, like I said, how it comes together. How do you put the right framework, the IPP framework-- and the same thing for water, by the way.

I should mention that 50% of the energy cost of water, and Dr. Nasser talked about the importance of desalination. We have just submitted bids and won and building projects close to under 40 cents a cubic meter. That's 40 cents for 1000 liters roughly. It just shows you when you can drive the cost down you can make a big difference. It's the commercially right thing to do, and you can drive it rapidly. You just need the right financing environment, you need the right government backing and the right frameworks, and you need our skills to be able to put this together and deploy it very rapidly. It's doable.

Abeer: I hear this a lot, financing. It's very important. It's something that you all have touched on including Dr. Nasser. Nicole, to bring it back to you, what do you think is the role of international partnerships to mobilize financing? Then what do you think could be done better in order to bring in this much-needed financing?

Nicole: Oh, look, to execute the energy transition, it's a partnership. It's a collaboration. It's also not just the collaborations we see today, we need to raise some other voices that we're not seeing around that table to move it to where we need to. The other thing I would say is it's not an issue of shortage of funding. There are trillions out there. One of the crucial issues right now for the speed and scale that we're not executing this energy transition at present is that we're not linking the right capital to the right type of deals or the execution.

We've got to look at what is stopping that nexus? The speed and scale. We've also got to look at that risk assessment. We've got to really change all our mindsets, not just the bankers and not just the governments and the deal makers and the investors, but even the financial modelers in that. We've got to rethink the economics to make this energy transition really executional.

The other thing is, and I would borrow the words of Dr. Sultan, COP28 president, is that we need leaps. We don't need small steps. What we need is leaders, whether it be government, private sector, or other parts of the industry, really stepping up and seeing what is needing and maybe being the first movers because as we know in the industry, once you're the first movers and you show the business case, the others follow. We need a little bit more of increased leadership across everyone, not just one part of the sector. It's everyone in the ecosystem.

It's really going to be the ones that are going to step up. Who are they going to be part of that execution of that energy transition. The other thing I think too is, and it was mentioned in the initial discussion, is that as much as it's important to change it to a green fuel and accelerate global renewables, we must also look at the wider framework, the grid. At the Bezos Earth Fund, we're about executing the energy transition.

If you're going to achieve that ultimate energy system that we're all aspiring for, you can't ignore the whole frame, which is the actual grid. Right now there's a wonderful opportunity on the grid as well as the development of renewables, is basically anywhere in the world we can correlate, we can share that REX and really accelerate it because we are moving into more of a digital economy. That digital energy transition can be accelerated through increased partnership and collaboration.

Abeer: That's great. Jeremy, funding mechanisms financing. I'm focusing a lot on that question because it is really what people want to hear about at this COP28 . It's what people want to understand how to, again, unlock. Funding mechanisms that work, that don't work. What has worked for you versus what hasn't and what do you think needs to be worked on?

Jeremy: I think what's unique about Yellow Door is we're doing small projects. Doing funding transactions on a small project, a case basic is absolutely inefficient. What is critical for us is that we're packaging together a lot of small projects into a portfolio where investors and lenders can look at it on a holistic basis, evaluate the risk, and make a wise investment. That's the target.

What are the barriers as you asked? I think one of the biggest barriers for our business is long-term planning. When there isn't consistency in regulation, when there isn't a view that we know what's going to happen in 5 years or in 15 years, businesses have a hard time making a decision. If I'm sitting with a CEO of a cement company, and he knows he can save 30% by choosing Yellow Door, he still might not go forward because he's committing to that long term. What if there's a policy change that affects his core business?

I think one of the elements that all financiers face is how do we make sure that we're going to be making these investments along with those businesses for that long

duration, which capital intensive clean energy projects require? Again, it comes back to the policy. Consistent policies drive long-term planning, drive lower costs, drive the capital.

Abeer: I just want to ask another question on the back of that. When you talk about policy making, that's something that certainly comes up a lot in this region, the fact that policies can in fact change overnight. Is that something that you think is more of an issue in this part of the world? What would your advice be to address that?

Jeremy: I think this region is certainly very dynamic. It's been growing so rapidly, and we saw this slide a few minutes ago showing the pace of energy growth, which is a reflection of the growth in the region. When things are growing, things are changing. This is a very accelerating place, but any emerging market faces those same fundamentals. I think there's two ways that we look at it. How can we think about renewable assets being funded and capital being returned on a more rapid basis?

Perhaps, as you just mentioned, perhaps it's a way of changing the way that we look at structuring the financing. Can it be a 5-year term versus a 20-year term? Can we pull in some other support to take the risk that's beyond the bankable period, beyond the 5 or the 10-year period? Can we get an offtake agreement or a redundant or a backup offtake with the utility? Looking at those structures is what we're trying to do to bridge the uncertainty.

Abeer: Then final question for the three of you starting with you, Rehan, technological advancements. I know a lot of people are interested in that discussion, in this COP and when talking about energy transition, but what do you think are the ways that technological advancements have aided in unlocking clean energy in a way that is sustainable but also cost effective because I know we've spoken about solar power and how over the past two decades, they're much more cost effective now? What other examples do you have for us?

Rehan: I'm going to talk on technology, but I really want to talk about finance because it's so important. When we do our projects, we're talking about 25, 30 year deals. You are really getting the multilateral developments. I love Dr. Nasser suggestion, by the way. We need to bring a lot more capital to the party for sure. We need to get a lot more private sector finance involved. To give you an example, one of the things that we're doing is we're getting directly with pension funds to get involved in our project.

On a typical deal, ACWA Power has a 80, 20, 75, 25 debt to equity ratio for our projects. For every essentially dollar that we deploy, you deploy another $10 of capital around it. You're really getting that to work. To accelerate that, is entirely doable. You've got to get private capital into it. On technology, to give you a very good example on water desalination. Historically, a lot of the desal plants, what we call multi-stage flash distillation plants, highly, highly energy intensive. Today, ACWA Power led the industry into sea water reverse osmosis, which is very low in energy consumption.

We continue to do a lot of stuff around software technology on driving the cost down. We are very active in the startup universe and working with the universities, for

example. We have an RD and innovation center that works with the likes of the KAUST and KACST and a number of different institutes in Saudi Arabia and in the open ecosystem. We're looking at all avenues where we can be making significant improvements. The other area is in green hydrogen also, which is relatively new. The work that we are trying to do with the electrolyzer manufacturers to get costs down is another area that we're trying to do some work in.

Abeer: Jeremy?

Jeremy: I'm very practical in how we look at technology, and in that, we really look for taking what's the best options on the market and implementing them. When we started in 2015, the most efficient solar panels we could put in and the cost of those panels was saving a customer 5%. One of our first customers, Unilever, forward thinker in this space, they were happy with that. The pace of evolution means that if I was installing that same system, that same customer today, I'd be saving them 50% and I'd be generating almost 50% more power from the same area.

That coupled with what we're now seeing as very rapid decline in cost of storage means that the amount of energy that a building, a factory, a commercial center can use for renewables is just shooting up. We're at that point where we've got customers who are choosing to disconnect from the grid because we can produce all the power they need.

We can have batteries to store and have a little bit of dirty backup of course, for the long, rainy periods, but we don't have too many of those here. Technology evolution is incrementally better year over year. It means that eight years ago, we crossed a tipping point for it to be cheaper on-site for a little bit of solar, today, we're crossing a tipping point for it to be fully renewables onsite.

Abeer: Nicole, ending this with you.

Nicole: Yes. No, certainly. Philanthropy does have a role to look into technology. We have a unique role in the sense that-- because we can take very high risk, we can take big bets. What we are looking, particularly with the Bezos Earth Fund, our system change focus is that what's the technology that we need to accelerate this energy transition that either isn't getting the funding or not the focus. Let us try and accelerate that research as well as that investment into the technology.

What you'll find is that we are looking at those gaps where there's already funding to certain technology. From my perspective, it does not make sense for philanthropy to go in there, but where philanthropy is very valuable is where funding's not going or sufficient funding, and it does actually show that there's a real scalable impact and a real impact to accelerate that energy transition.

We are very much looking at technologies all around the world. The opportunity, but the challenge for us at the Bezos Earth Fund is that we can go anywhere in the world and anywhere along the value chain. It's really just honing in as to, "How can we make our precious capital, because it's 100% grant-based, really catalytic as a co-partner and a collaborator to execute this energy transition?"

Abeer: Thank you so much for that. Thank you to my panelists for this wonderful discussion, and for all of you for tuning in. I'd also want to say thank you again to our sponsor, Red Sea Global for the opening remarks. The second half of the Bloomberg Green Event is ongoing downstairs. You just have to go down to the ground floor and you'll see where the signs are to head to the main stage area. Thank you again for joining us. Thank you to all of you.

Rehan: Thank you.

Nicole: Thank you.

Jeremy: Thank you.

Abeer: Have a good rest of your day. Thank you.