

# Power Finance & Risk



## **PFR OFFSHORE WIND ROUNDTABLE 2021**

Sponsored by:

BRACEWELL

CohnReznick  
Capital 

Unauthorized reproduction, uploading or electronic distribution of this issue, or any part of its content is illegal without the Publisher's written permission. Contact us at (800) 437-9997.

## ● PFR OFFSHORE WIND ROUNDTABLE 2021

### PARTICIPANTS:



**Álvaro Ortega**, CFO, Vineyard Wind



**Alberto Garcia**, Managing Director, Head of Energy, Project & Acquisition Finance North America, Santander



**Martha Kammoun**, Partner at Bracewell



**Gary Durden**, Managing Director at CohnReznick Capital



**Philippe Delleville**, Global Head of Project and Development Finance at Siemens Gamesa



**Taryana Odayar**, Editor, Power Finance & Risk (moderator)

**Taryana Odayar, PFR:** What have been some of the key developments in the US offshore wind market over this past year? From the financing side, the project development side, equipment supply chains, legal and regulatory?

**Martha Kammoun, Bracewell:** There are a couple of key developments I would focus on. One, just before the end of last year, the IRS issued Notice 2021-05 extending the continuity safe harbor for offshore wind to 10 years and citing various challenges typical to offshore wind, mainly around construction, permitting, the environment and transmission. Second, the Biden administration set an ambitious goal for offshore wind – 30 GW by 2030. We are also seeing similar goals at the state level, such as in New York for example. And finally, the Vineyard Wind financing. Vineyard Wind got their regulatory clearance

and the closing of that financing is viewed by many industry players as a step forward.

**Alberto Garcia, Santander:** The change in the regulatory environment has been very material. Particularly having worked as an adviser on Vineyard Wind since 2018, we have gone through different stages, where we had to stop for a while and then come back. So that has been key, getting to where Vineyard Wind is today and having reached financial close and with an ongoing syndication process. We were very happy for Vineyard Wind and the terms that they were able to achieve and that we were fortunate enough to help them to get.

**Odayar, PFR:** Alvaro, anything to add?

**Alvaro Ortega, Vineyard Wind:** The three points that Martha and Alberto already men-

tioned. The first one being a higher and stable ITC, then our permit for Vineyard Wind I that has proven that it is possible to achieve a fully permitted commercial-scale wind farm in the US and reach financial close. This shows that an offshore wind farm can be not only permitted but also can be financed and supported by the financial community.

**Philippe Delleville, Siemens Gamesa:** From the OEM perspective, the name plate on the turbine continues to go up. If anything, it's been accelerating. I was presenting a project to a bank for 2022 with the 8 MW machine and now my colleagues at Siemens Gamesa sales are promoting a 14 MW machine. It does present obviously a lot of advantages in terms of the LCOE we're capable of delivering to companies such as Alvaro's. It starts to pose a challenge when it comes to the size of the equipment, obviously in trans-



## ● PFR OFFSHORE WIND ROUNDTABLE 2021

portation. Onshore is a little bit more affected than offshore by the growing size of the machines.

**Gary Durden, CohnReznick Capital:** From a financing perspective, the extension of the continuity safe harbor was absolutely critical and I think it's going to help ease a lot of other projects and give lenders and financing parties the confidence that the offshore wind sector is finally here and really taking off. And beyond that, it hasn't happened yet, but I'm really looking forward to what happens with the pending tax legislation.

**Garcia, Santander:** As Gary was saying, there are more changes coming and it seems that they should add to these tailwinds that the offshore industry is experiencing in the US. We expect changes that will be important in alleviating one of the big problems in general which is how the tax equity market is performing, particularly the ITC, where you can see that it's a constrained market, and the offshore wind farms coming to consume part of that ITC capacity will only exacerbate the problem. So, if the changes that are expected to happen can alleviate that, that would be important not only for offshore wind but also for the rest of the renewables market, particularly on the solar side.

**Ortega, Vineyard Wind:** The changes that Alberto is referring to are the potential direct-pay that we all expect by the end of this year and the prevailing wage requirements and local content requirements to claim tax credits.

**Garcia, Santander:** It's going to be critical and seems to be very similar to the cash grant program back in the day and that was something that the banks were able to get familiar with very quickly to be able to bridge those structures. So, we would anticipate something similar happening and unleashing a large amount of capital for these projects.

**Odayar, PFR:** With the domestic labor requirements and buy-American, build-American equipment rules, do you think that's going to pose more of a challenge for getting these types of projects across the finish line?

**Delleville, Siemens:** The way the bills are presented, I don't think it creates any immediate challenge because for the first few installations we're still going to have to import the equipment. We at Siemens Gamesa – and I'm pretty sure you have the same commitment from our competitors – we're committed to manufacture our offshore equipment locally down the road. So, we will have that local content. The bill's proposal is an add-on to what you already get if you have the local manufacturing, so it's a good incentive from that perspective.

But if I look at it from purely economic terms, I don't really like this type of incentive because it would have a tendency for the manufacturers to become a little lazy and maybe not be so price competitive. But as far as the dynamics that this administration is trying to create, I think we're on the right path.

**Odayar, PFR:** What do the cost curves look like as more and more of offshore wind equipment gets deployed?

**Delleville, Siemens:** Well, if you consider three dimensions, one being technology, I think the reduction of LCOE through technology is through bigger size turbines. I do see a point where you start to have some limitations on the vessels that are available and so forth. So, maybe a little less to draw from the technology dimension, but I want to highlight the operational dimension, and through digitalization we know the performance of our turbines really well. Mean time between visits to the turbines during the operation phases is really going down quite a lot. Availability numbers for every offshore project in Europe, at least within the Siemens Gamesa fleet, are really excellent.

I think where we may have a bit more challenge is with the supply chain. There's going to be a lot of growth coming, not only in the USA but also in Asia, in Europe, for offshore wind. I mentioned the size of certain components. We're seeing some specialty steel manufacturers getting challenged with the size of components we're asking them to manufacture. So, the short answer is, we're going to continue to improve LCOE, but maybe the mix of where the improvements will come from will change with technology evolution being a little prominent and with operational performance and supply chain being bigger drivers.

**Odayar, PFR:** We've already touched on this briefly, but of course the big announcement this year was the Vineyard Wind project getting clearance from BOEM and then reaching financial close. That project has been waiting in the wings for the last three years with tax equity and lenders on board. Alberto and Alvaro, can you take us behind the scenes and go over some of the challenges that you faced and how you overcame them?

**Ortega, Vineyard Wind:** The success for Vineyard Wind has not been easy. Now everyone looks at the company and says, 'Hey they got the permit, they got financing.' But it has definitely not been an easy path. I think that our success has been driven first, by being a joint venture with two really powerful sponsors in the offshore space bringing their experience to the US, but also using US knowledge about how to permit a project. And in the case of the financing, mixing a group of international banks – American, European and Asian banks.

In 2019, our project was put on hold, but we continued working on the permitting, re-negotiating with suppliers. We just stayed resilient despite not knowing what could happen with our permit and the additional environmental impact review that we were going through.

Then COVID hit and the financial markets changed. I remember Alberto and I having a lot of conversations during that time saying, 'OK, where do you see the market? What is happening?' The spreads went up and then they came back down. At the end, I think that we reached a very optimal deal for all parties. And at the same time, the ITC was changing. We were going from a 24% out to an 18% and we went up to 30%.

So, there was a lot of uncertainty for two years, but the financial community was behind Vineyard Wind at all times. All the banks were backing up our project. We still have tax equity to be to be committed but even without it, we reached financial close in September of this year, the financial community has given Vineyard Wind I strong support, and we will keep working with potential tax equity investors now.

## ● PFR OFFSHORE WIND ROUNDTABLE 2021

**Garcia, Santander:** It's been a process full of learnings, because it's a first in many ways. The regulatory aspects on all the permitting, all the different issues that were associated with the administration, that's been a big challenge and has made us change course over this period several times, right up until the end, until we saw a clear line of sight to get to financial close. It was already a challenge with some of the peculiar rules that the US has, like the Jones Act. It adds up to the logistics issues for building a very complex asset, but on top of an industry that is not mature yet in the US. So, you need to bring a lot of materials from Europe already, and that combined with the Jones Act is a challenge for the project company to build the asset.

Vineyard Wind has very experienced people at the company and had developed a plan that has convinced the financial community that it can be achieved in an efficient way. But it has certainly been something that has been looked at with environmental permitting matters, some threatening litigation that could happen in these type of projects, and particularly because of the environmental aspects. And you have the supply chain issues that Philippe was mentioning. That's something that has been looked at very much in detail by the banks as well. You have insurance, for instance, in these types of projects where you have a lot of equipment out in the sea, in in a country that suffers from hurricanes. So that's something that has been looked at and has been extensively diligenced and has been overcome, and I think it's going to be more critical the moment that these projects start going down the East Coast.

One other factor that I will mention as being key for success, and hopefully one of the things that we brought to the table is, you need to mix offshore experience with experience with the US renewables structures, in particular tax equity-driven structures. We were able to combine both and help the sponsor from the advisory side. But that's also something that was important in all the financing parties that were involved. Because you have parties very experienced in the US dealing with tax equity, but they may be regional banks that are not used to doing offshore in Europe. Then you have a lot of players that are very well versed in offshore in Europe, but they never come to the US renewables market, so mixing our

newcomers in different aspects of the transaction was also a challenge at the beginning and is a challenge now, through the syndication process that our institution is involved in as an agent. There are a lot of firsts for many involved in this project.

**Odayar, PFR:** Over the past year, the Biden administration has been rolling out some very encouraging policies for offshore wind. How are potential investors now thinking about these types of projects – are they still approaching them with caution? What's your assessment of the appetite for these types of deals?

**Kammoun, Bracewell:** From our seat, there is increased interest. We are being contacted by a lot of developers and operators who are looking to get into this space or wondering whether there are some opportunities to partner up. So, there seems to be a positive reaction to what people have been seeing from the administration.

As Alvaro mentioned, these are very capital-intensive projects, so the main players are not going to be smaller entities. They're usually big-oil-turned-energy-majors who either partner up with a large private equity fund, or form joint ventures, or both, and they are usually able to use their balance sheet to support the development phase, and that is helpful because the permitting period for offshore wind is longer.

In terms of financing, can I actually ask Alberto and Alvaro a couple of questions on Vineyard?

**Odayar, PFR:** Yes, now's your chance!

**Kammoun, Bracewell:** Alvaro, did you have to provide credit support for this financing or was it on a full non-recourse basis?

**Ortega, Vineyard:** No, it is a full non-recourse project, but obviously our capital stack right now is made out of the debt that we raised plus equity commitments from the sponsors.

**Kammoun, Bracewell:** And the equity has to be fully funded before the debt is available?

**Ortega, Vineyard:** Everything happened at the same time, so the equity commitments

happened at the same time as the debt was raised and tax equity has not funded yet, but once tax equity funds, that will be part of the capital stack and the equity commitments from the sponsors will be reduced over time.

**Garcia, Santander:** What I can say is that it is a fully project finance transaction and it works the same way as a normal renewables deal in the US. If you have equity then you put it up first or you back it up, so it is back-ended, and there always has to be either a guarantee or an LC for equity that is not contributing. So, from that perspective I would say that it's a conventional transaction. It is just extremely large for what the renewables market is used to, and that obviously as you were saying, it affects the type of sponsors that can play in this space right now.

We've started to see more final pure financial investors interested in this space and I'm not sure if that's going to be a trend or not, but we just tend to see a little more interest and there have been some announcements recently. But right now, it's typically larger energy companies, typically a European flavor.

**Kammoun, Bracewell:** How did you get comfortable not getting a commitment from tax equity? Is it a market view, or was the commitment too expensive? There seems to be some concerns about what fits into the project costs for purposes of the ITC. Has that been a concern?

**Ortega, Vineyard:** Not from my perspective as it is very unusual to see any tax equity committed so far in advance when we are going to be reaching COD at the end of 2023. So, I think that everyone understood and there's a high cost for that commitment for the project, but we needed to complete our financing from a project debt perspective to have a construction loan and begin construction.

The banks felt comfortable with closing now without having tax equity committed but being prepared for that tax equity to be committed next year.

**Garcia, Santander:** From the lenders' perspective, you have to have a fully funded business plan. You need to be able to build the project. That is achieved the way that the current capital structure works right now with

## ● PFR OFFSHORE WIND ROUNDTABLE 2021

the current financing and the tax equity commitments will need to be added to the structure. And as Alvaro was saying, we have done all the possible work that we could to prepare for that. Will there be a lot of work when that happens? I'm sure there will and that it will be not easy and that there will be a lot of discussions, but we would have prepared the structure as much as we could for that time.

Tax equity commitments will be very large for these type of projects and things are changing as we were discussing before in Washington, so maybe in a couple of months the situation could be completely different by then. So, we would need to have another roundtable, right?

**Odayar, PFR:** And hopefully we'll be able to host you in our New York offices rather than virtually! Gary, there's a lot that has been covered here. Anything to add in terms of where CohnReznick is seeing

### opportunities in the market, or client feedback?

**Durden, CohnReznick:** From a tax equity perspective, the market has for the last year-and-a-half been tighter than normal because of the economic recession caused by the COVID shutdowns. I'd say that this market constriction applied through most of 2020 and the first half of 2021, but we're now starting to see the tax equity market loosen back up and investors are really interested in deploying capital and looking at projects across renewable energy and with respect to offshore wind.

For the Vineyard Wind project, the hold on the permitting back in 2019 put a chill on the offshore wind market in general. So, seeing Vineyard Wind getting fully permitted, it was almost like a starting gun going off for offshore wind. It's giving investors the confidence that that the industry is moving forward.

Offshore wind in general is very attractive to financing counterparties. The project sponsors that we've seen to date are very large, well capitalized, and experienced, so very financeable sponsors. The projects themselves are very financeable with long-term contracts and utility offtakers. So, I think offshore wind is uniquely attractive to both tax equity investors and lenders compared to many onshore wind projects, because of some of those characteristics, and also because the large check sizes allow lenders and tax equity investors to deploy capital at scale with the same amount of due diligence that they're going to do on a 100 MW onshore project.

All of those things are attractive to financing parties and we're seeing a lot of interest from folks that we're talking to for this sector. It will garner a lot of attention and CohnReznick Capital expects to see new entrants coming into the tax equity market driven by ESG goals and mandates, plus attractive returns.



Attorney Advertising

## We Know Energy®

Bracewell LLP is an industry leader in offshore wind development. We represent leading developers and infrastructure funds on commercial-scale projects in:

- Acquisitions
- Joint ventures
- Regulatory risk assessment for investment transactions
- Regulatory counseling on the federal leasing program
- Commercial negotiations
- Federal and state permits for development
- Regulatory counseling on the federal leasing program
- Commercial negotiations
- Federal and state permits for development

# BRACEWELL

bracewell.com



## ● PFR OFFSHORE WIND ROUNDTABLE 2021

So, in the coming years, we expect to see more non-traditional tax equity investors enter the market that can help with some of the demand that we will be seeing for monetizing tax benefits from offshore wind as well as some of the other onshore wind developments such as the 45Q.

**Odayar, PFR:** And Philippe, are we also likely to see more involvement from the OEMs and EPC contractors on the cash equity side?

**Delleville, Siemens:** Siemens Gamesa is a turbine manufacturer first and foremost. Through **Siemens Bank**, we're able to offer equity positions to our customers and many of our customers have taken advantage of that offer. Having said that, I think there's a lot of new entrants in the market and appetite for equity investment is such that the OEMs investing in projects is not really needed. If you look at the oil majors coming into offshore

wind, most of them don't have projects in development in the US now, but will have appetite to invest in projects like Vineyard Wind. There's going to be a lot of access to cash equity.

I also actually had a question or two for Alberto – don't you think that once we manage to reduce the inflated cost of capex on the offshore projects, that maybe there's a point where we can pivot from the ITC back to PTC for offshore wind projects?

**Garcia, Santander:** Maybe, yes. I think there was a moment in time where it was not clear which was better. I think right now, probably the ITC will be better for most. But it depends as well on where the rules are and what is the pricing of the different markets. So, I definitely see that as a possibility in the medium-term.

I'm basing that on the fact that a few years ago, when we were doing the Vineyard Wind analysis, at some point it was not clear which one would be the best one. So, I would not rule

out that it could come back to that situation at some point.

**Durden, CohnReznick:** Assuming the market stays the same with respect to tax equity, if suddenly you have a PTC option, tax equity investors generally like the PTC better because it's spread out over more time, there's a better accounting income profile, so it could help them in that sense to get the supply to meet the demand.

**Garcia, Santander:** That's particularly true with the type of checks that are going to be needed in these type of projects as they're very, very large. So, these issues that we were referring and Gary was talking about is particularly excruciating with the ITC when you're writing, say, an \$800 million check.

**Kammoun, Bracewell:** Generally, the direct-pay mechanism may have an impact on whether investors prefer the ITC or PTCs for

# RENEWABLE ENERGY EXPERTISE

Exceptional advisory services for leading investors, smart energy innovators and global clean energy corporations.

Project Finance | M&A Advisory | Capital Raising | Restructuring

**200<sup>+</sup>**

Transactions  
Closed

**40<sup>+</sup> GW**

Financed  
to Date

**\$26<sup>+</sup> Billion**



Total Transaction  
Value

Every transaction a catalyst for change, every closing a step towards a cleaner future.



To learn more, contact:

[Info@cohnreznickcapital.com](mailto:Info@cohnreznickcapital.com) | 917-472-1286

[cohnreznickcapital.com](http://cohnreznickcapital.com) | Connect with us  

Securities offered through CohnReznick Capital Markets Securities LLC, a Maryland limited liability company. The firm is a member of FINRA and SIPC and is registered as a broker dealer with the SEC.

**CohnReznick  
Capital** 

## ● PFR OFFSHORE WIND ROUNDTABLE 2021

their energy investments, because they might have to make an irrevocable election for either direct-pay or the tax credit. If so, the consequences of an irrevocable election are much greater for an ITC than for PTCs, where investors may be able to toggle between direct-pay and the PTCs from year to year.

**Odayar, PFR:** All these proposals are trying to make their way through Congress by the end of this year – do you think they will go through by year-end or get pushed into next year?

**Ortega, Vineyard Wind:** You never know. They always have the ability to close out before the last day of December or the day before Christmas. With Congress, you never know.

**Odayar, PFR:** Lots of suspense! Martha, at the start of the conversation, you brought up the BP and Equinor offshore wind partnership that Bracwell worked on earlier this year, and there have been other oil and gas companies like Chevron partnering with Ocergy and TotalEnergies partnering with Simply Blue Group to do floating offshore wind. Apart from the oil and gas majors, and also the IPPs that Philippe mentioned, who are some potential new entrants?

**Kammoun, Bracwell:** From our seat, potential new entrants may include operators of renewable energy assets. They have experience with tax equity and how it works in the US generally, the power markets expertise and the regulatory expertise and so they would have value-add if they are looking to get involved in this new space.

**Garcia, Santander:** We're seeing the same, but I will add that we are also seeing large infrastructure funds looking into the space with much more appetite in the near future than before. And I think they will look for experienced partners on the operations side and on the development and construction side.

These large infrastructure funds were not very active in this space a few years back. They left the development, the leases, to the energy companies there were more used to this, even oil and gas companies. But now we're starting to see more interest from them.

I can link that to the debt side as well. We have been looking into debt financings for Vineyard Wind and back in the day, we did an extensive sounding in the institutional market and what we found is that probably they will need these type of assets to be built in order to get exposure to it, particularly for the way that the construction is going to work in the US is going to be a little more complicated than in Europe and because of the level of maturity that the industry has in the US. I think that's probably going to push these first assets to get to COD, start operating, have a track record and then we will probably see interest from institutional investors and that will open up another financing market. That will also make things more interesting.

**Odayar, PFR:** Where do you see construction debt pricing? And where do you think long-term debt will price for US offshore wind projects?

**Garcia, Santander:** We've been talking to a lot of people, as you would imagine. In a conventional solar or wind project in the US, you tend to see that the price of the construction is driven more by duration, and then it tends to be cheaper than the long-term debt or the mini-perm debt that will come in operations.

That's something that we haven't seen in offshore yet, and I don't think we will see it for a little while because of the level of complexity of the construction and how it's recognized both by sponsors and also by financing parties.

In terms of the long-term financing, it's difficult to speculate. We have a sample size of one. But it seems that the cost of debt is driven by the demand and the liquidity from financing parties that want to be in a strategic sector within the renewables space in the US, rather than a reflection of our direct duration or risk.

The amount of liquidity that was available for Vineyard Wind to be financed was many times the amount of debt that was needed. And obviously there were different prices and different tenors, but still the amount of liquid was very, very high and I think that's been by far the most important driver of the price rather than considerations from the actual project.

**Odayar, PFR:** Since Vineyard Wind would be the first commercial-scale offshore wind farm in the US, how much did you look to European offshore wind financing models as a reference point?

**Ortega, Vineyard Wind:** We have been using Europe as a reference when it comes to the financing models. But also, the US is such a different market in so many ways that I think combining the experience is important. That's why, in our case, we hired Santander, which is one of the leaders in the project finance space. Santander approached our deal saying, 'Yes this is offshore and we bring expertise from our bank in Europe and the offshore experience in Europe, but can adapt it to the US market.'

Obviously in the US, offshore has not been before, other than Block Island, and that's much smaller-scale. But I think that the onshore renewables project finance market was so developed that Santander has been able to use it as a reference with the specifics of offshore based on what we have in Europe. So, I think it's been the right combination of both worlds.

**Garcia, Santander:** Certainly the experience in Europe has been important not only for financing parties to look at the project and get comfortable with it, but also as the base for Avangrid and CIP and Vineyard Wind to establish the project. From a financing perspective, because of the tax equity dependency in the structure, we have always looked at this more like a US renewables project that happened to be offshore, rather than an offshore wind project that happens to be in the US. So, it's been a little more similar to other renewables projects or will be once the whole capital stack is complete. But it was definitely financed from a US-centric perspective.

**Ortega, Vineyard:** I agree with Alberto. That's a very good point. A back-leverage structure is something that obviously doesn't exist in Europe, so that's why our reference in project finance had to be the US.

**Odayar, PFR:** Because of the sheer size of these projects and their capital-intensive nature, do you think that hybrid financing structures could be used like a mix of project bonds and bank debt?

## ● PFR OFFSHORE WIND ROUNDTABLE 2021

**Garcia, Santander:** We evaluated that and we think that it could be very interesting because of the nature of the PPAs as Gary mentioned before – you have very good PPAs, very long-term PPAs typically with these types of assets.

When trying to find the institutional piece of the puzzle, it doesn't seem that it could be competitive right now with the current cost of financing that you find in the bank market versus mixing banks and institutional financing. The banks will be very competitive, but I think it would be difficult to find institutional investors that are comfortable with the asset class in the US today. I am sure that when Vineyard is built and we have an operating track record, the situation will change. But it would be difficult for institutional investors to commit today to support construction. We certainly tested this when we were looking at all the potential alternatives, but it was difficult to compete with the aggressiveness of the bank market today.

**Durden, CohnReznick:** Maybe the bond financing would be a good option between five and seven years, when the tax equity investment is approaching the flip date purchase option and the loan is approaching its maturity date. It could be a good time to do one big refinancing to buy out the tax equity investor and refinance the back-leverage with some long-term bond debt.

**Odayar, PFR:** In terms of other projects coming through the pipeline, Philippe, I know that Siemens signed an order to supply turbines for the Revolution Wind and South Fork wind projects on the East Coast. What are the next projects that we might see coming online?

**Delleville, Siemens:** I think for the foreseeable future, it is still going to be the Northeast. We know there is a lot of work toward the South and obviously California, but we're talking horizons of between six and 10 years. For now, there's going to be plenty of work just here in the Northeast. But as for all of us here on the panel, what's going to keep us busy the next few years is going to be in the Northeast.

**Odayar, PFR:** There are also project financing opportunities arising adjacent to the offshore wind sector. Earlier this year,

**Avangrid submitted several proposals to the Department of Energy for green hydrogen production facilities that would be powered by offshore wind. Something to look out for, not in the near-term, but perhaps over time?**

**Delleville, Siemens:** I think it will depend on the offtake for green hydrogen. If you asked the question today to pretty much anyone in the market, 'Do you want to do green hydrogen?', everyone says 'Yes.' But is there real offtake that exists today? Not in any kind of size where you would consider investing in a large facility.

Green hydrogen is still more expensive than general gray hydrogen, so we have some ways to go. But the good news is, everyone wants to do it. I think it's great that Iberdrola had that DoE proposal.

As far as how it's going to happen, as a technology company, we're experimenting with what we call 'renewable hydrogen upgrades,' so that would be more for onshore wind farms that are struggling a bit with revenues and are perhaps out of PTCs, so if you find the offtake then we have that technology ready to go now. I think what Avangrid was thinking of is maybe having an electrolyzer by a big substation that's being fed by a wind farm.

We work as a technology provider, so we're working on turbines where each turbine would have their own electrolyzer and then you connect them to a pipeline, and we believe there is a big play in the future for that type of technology. But again, we're talking four to five years before it becomes a recurring reality.

**Odayar, PFR:** Any final thoughts on the offshore wind market in the US in terms of future projects to look out for, where the financing opportunities are?

**Kammoun, Bracewell:** Going back to the beginning, the new administration has set a goal of 30 GW of offshore wind by 2030. There seems to be a lot of momentum and a large number of people working towards that goal, including at the Department of Energy, and also the Department of Transportation.

BOEM also just released their Offshore Wind Leasing Path Forward map and it looks ambitious with several auctions planned in the next few years. I think the time is now.

There is actually concern among people thinking, 'Are we too late?' It's not too late yet, but I would say that it is primetime offshore wind.

**Durden, CohnReznick:** I would just say that the pending tax legislation could have a big impact on the renewable energy industry in general, but also the offshore wind industry. If direct-pay becomes an option, I don't think that third-party tax equity will go away, but I do think that many projects will choose to use direct-pay, which will free up more tax equity capacity. I think that offshore wind sponsors may be in the best position to receive attractive terms from tax equity investors, so the ITC may be the more optimal choice as opposed to direct-pay, so it's something to look out for.

**Garcia, Santander:** From the Santander perspective, we are big believers in offshore wind and we think that it's key in the energy transition. We have been very active in offshore in Europe, in Asia and now in the US we want to play within that market. It's strategic for our team and it's strategic for us globally as a franchise. So, we could not be more excited for the US and we're willing to play our part.

**Delleville, Siemens:** Well, I work for Siemens Gamesa which is a European company, and I'm based in Orlando and am a naturalized US citizen. So, I'm really looking forward to catching up with Europe in terms of offshore wind. 30 GW is a good objective and I think it's really exciting for all of us here.

**Ortega, Vineyard:** I agree with Philippe. The US has traditionally been behind on offshore wind. In our case, with Vineyard, we've proven that it is possible to permit and to finance a project. Now we are under construction. Things to look at are 30 GW by 2030 like others have mentioned, and a supply chain that is able to keep up with the industry in order to achieve that.

The new leases are also on the map. Like Martha mentioned, there's an ambitious plan from BOEM so we will have to keep up. And the financial community is supporting all the ESG commitments related to renewable energy. So, we have the right mix on the table, and we just have to keep up because it's a big target. ■