# Powered by Marsh FINPRO

## Episode 10

# Renewables today: Challenges, opportunities, and risk management to drive growth

### Sarah Baldys:

Welcome to the Marsh Powered by FINPRO podcast. Through a series of interviews with experts from across the energy and power industry, this podcast will examine key challenges and opportunities brought by the energy transition and how to approach and manage the evolving management liability risks this transformation brings. I am Sarah Baldys, US Power and Renewables leader at Marsh's Financial and Professional Liability Practice, and I am pleased to introduce the host of the Powered by FINPRO podcast, Grace Brighter.

### Grace Brighter:

Katie Burke is the renewable energy industry leader and client executive in Marsh's, US power and renewables industry practice, a global insurance brokerage and risk management consulting team that delivers solutions to the largest energy providers in the world, including public power cooperatives, investor-owned utilities, and independent power producers. Her role includes leading Marsh's renewable energy practice by providing services and strategic risk management solutions to address the industry specific challenges facing organizations. As a client executive, she leads client service teams through renewable strategy and marketing cycles. In addition to assisting clients with identifying and solving emerging risk challenges within their organizations and industries, Katie handles a diverse portfolio of clients ranging from independent developers of renewable assets to some of the largest foreign investors in our domestic energy and power infrastructure.

Hey Katie, thanks for joining us today. Could you start with telling us a little bit about your background and your current role here at Marsh as our renewable energy industry leader?

### Katie Burke:

Yeah, thank you so much for having me today. I really appreciate it. A little bit about me. My background is actually in engineering, and I started out my career on the risk engineering side with the carriers. And then after a few years of doing that, I came over to the broker side. So, I've been with Marsh for just over four years now. And within Marsh, I've always worked within our energy and power practice. And so when you think about Marsh, obviously we are a huge company, the largest broker in the world, and we organize ourselves based on different industry segments so that we can really specialize and have expertise focus on that industry and those challenges that our clients face. So, within the energy and power sector, we have different focus areas, one of them being renewables. So, I am the industry leader for our renewables practice.

And really what that means within Marsh is understanding where our clients currently are in the landscape, where they're going, as well as what challenges they're facing, and then trying to make sure that we have the right solutions to help them address those challenges and bringing in the right experts to focus on that. So, we have here in the US around 150 different colleagues that are focused exclusively on energy and power clients specific to renewables. So that really helps us address those challenges for our clients in that space. And then my other role here at Marsh is being a client executive, again, focused on only energy and power clients, but that helps me have a good understanding of the day-to-day challenges that these organizations are facing and making sure that we are constantly innovating and bringing new solutions to the table to help them be as strategic in this space as possible.

### Grace Brighter:

Great. Thanks Katie. So really appreciate that overview of this sector at Marsh and where you sort of fit into that with your role. Do you think you could explain what we really mean when we talk about renewables or when we say renewable energy? What exactly do these terms encompass?

### Katie Burke:

Yeah, so I think that it's generally a pretty broad term when we are thinking about renewable energy technologies. When it comes down to it, it's really any power generation source that can be renewed without a finite resource. So that can incorporate anything from

wind energy to solar and batteries, which everyone has probably heard of, but that also extends to different technologies like biofuels or hydroelectric energy, also using geothermal energy. So, there's a number of different, what we call technologies out there that would be considered to be renewable. And I think when we are talking about renewables in this context as with regards to the US specifically, the primary technologies that we would be focused on are going to be onshore wind, solar and battery energy storage systems. That's going to make up the majority of what the renewable energy projects that are operating and under construction here in the US are. Not to say that other renewable energy technologies are not out there and being developed like hydrogen and carbon capture, for example, but those are a few years away still at this point as far as being operational and adding power to our grid.

## Grace Brighter:

Great. And yes, Katie, you're right, there's definitely a lot of attention on the sector, whether that be in the news or just politically. I think it would be helpful for you to really just provide your insight on the current renewable energy landscape as you see it today.

## Katie Burke:

Yeah, absolutely. And so, there's a lot there. So, I'll kind of start out with regards to the landscape in the United States. Renewable energy generation accounts for about 26% of all the generation here in the United States, 40% of that's natural gas. We have about 16% coal and then 18% nuclear. Just to kind of help frame where we sit in the US, that number that's being contributed by renewable energy is only growing year after year. So, there's a number of factors that are impacting the industry overall. Number one, climate change in the incentive to continue reducing those emissions overall and impacting the planet. So that's one factor there. Another one here in the United States that's going to be one of the main drivers that we've seen is different legislation out there. So starting out with the Inflation Reduction Act, which is a piece of legislation that was passed in 2022, this basically extended the availability for different tax credits that would be applicable to the development and operation of different renewable energy projects.

So that extended the lifetime of the available tax credits for wind and solar. It also introduced the availability to get tax credits for different developers on different technologies. So that introduced the ability to use those when it comes to battery energy storage systems, hydrogen, et cetera. So different technologies we're now able to get those tax credits and apply them accordingly. The other part of the Inflation Reduction Act is introducing the transferability aspect of those tax credits. So that brought in a lot of private investment from different companies that might not have been able to really capitalize on that in the past. So, because of the Inflation Reduction Act, we saw about 370 billion of investment in the space since that passing, and that has been a huge boost to the renewable energy industry. Moving on to 2025, a big piece of legislation, One Big Beautiful Bill, we call it OB3 because it's not beautiful when it comes to renewables, unfortunately, it is revising the available tax credits.

So, what the Big Beautiful Bill has accomplished with regards to renewables is its sun setting the availability of those tax credits at a much quicker pace. So, for again, solar and wind projects, which again, like I mentioned, solar, wind and battery energy storage systems are making up around 60% of all of the renewable energy projects that are operational and in development here in the US. So a big chunk of that there, that's going to be sunset by July, 2026, which means all of those projects need to have started construction by that time in order to get those tax credits that were previously available under the IRA or have reached completion by the end of 2027. So, with that challenge, there's a lot of rush in the industry to get those projects underway so that those tax credits can be used. And the big consideration here is the economic evaluation of these projects.

There's very, very tight margin and very little ability to make profit without the tax credits. So, all of the companies that have invested in this space are feeling the squeeze. The other challenge is the investment to develop one of these projects is typically a multi-year investment with regards to getting the adequate amount of land, the leases, the technology and the equipment, and then the interconnection queues. So, when you have a project that's connecting to the grid in the United States, you have to go through the interconnection queue, which is a huge bottleneck when it comes to power generation in the US. So, we've seen over the last four years, the timeline for the interconnection queue increasing from about two years for project to anywhere from four to five years. And that timeline's only increasing because there's so many projects in the queue and they all have to undergo the same studies prior to connecting to the grid.

So, the amount of investment that each of these companies has made into the renewable energy space is really, really tightening at this point. And so, we're seeing that huge rush. Another aspect of the Big Beautiful Bill that I want to talk about is the FEOC restrictions. So, this is foreign entities of concern (FEOC). So, this is basically a restriction on these projects on where the supply is coming from and so there's different entities or countries that have been identified as FEOC countries and China being one of them. And so unfortunately, especially for solar and wind, about 80% of the supply chain for those projects comes from China. And so, if projects are obtaining their materials and equipment from one of the entities, the restriction will apply and there'll be large penalties on that project. Again, driving down the margins. So, there's a big focus on supply chain as well within the landscape.

So, where those companies are able to get those materials from as well as the suppliers are now looking to move their manufacturing and supply capabilities to any entities that are not considered a FEOC entity to

avoid those restrictions. So, we're seeing a lot of manufacturing capabilities pop up in different areas, the US being one of them, but other areas of the world as well. This is going to cause opportunity for sure within the industry for more manufacturing capabilities in different areas. But the other challenge is ensuring that the manufacturers of these pieces of equipment are going to be standard and meeting those requirements for resilient projects, right? We want to make sure that they're not cutting corners and they're materials that are meeting different quality control there. So that's going to be a challenge in the next few years there. And then kind of pivoting, but the main thing that everybody hears about when it comes to energy demand here in the United States is demand group.

So, you have AI and data centers popping up and demand growth is expected to increase five to seven times over the next three to five years in the United States. And we're estimating that the transmission grid will require up to 57% growth by 2035 to meet that electricity demand, which is massive when it comes to these power generation sources and coupling them not only with the generation, but also the transition and distribution to be able to get that power to the end user.

So, with the demand, we're also seeing a lot of these companies pivot to providing behind the meter generation. So that's kind of going around the utilities and providing that electricity and power straight to the end user, which is typically data centers, which it brings up its own challenges and risks in its own way as far as making sure that that power is reliable, you're meeting your contractual obligations, and, when it comes to data centers, obviously the big challenge is needing to have 24/7 reliable power. Renewables themselves are intermittent in their nature, so coupling them with battery energy storage systems and making sure that there's a resilient backup is going to be a huge factor here. So, there's a lot there, but the landscape is dynamic. I would say at the moment we are seeing some challenges with regard to renewables and again, the restriction on the ITCs that are available or the tax credits, but at the end of the day, the demand growth is there. And renewable energy projects, again, have been in development for a number of years now, and they are deployable now so they can meet that energy demand growth within the next one to two years, while other power generation sources are going to be important, like natural gas, nuclear, et cetera. But each of those have a much longer lead time as far as their ability to generate that power and get it to the grid. So, we're focused on more of an energy addition conversation rather than energy transition in the US right now.

## Grace Brighter:

So, Katie, as you said, there's so much going on in this space. There's lots of challenges while also a ton of opportunity. So now I think maybe we can focus on some of the emerging risks companies in this space are facing today and really get into how they are adapting to such ever-changing times while also maybe touching on how this world of insurance, which we all work in, is supporting these companies.

## Katie Burke:

Yeah, absolutely. I think that one thing to note is because it is so dynamic and the energy industry has been changing almost on a daily basis throughout the course of the year, there's so many risks that I think a lot of the companies in this space aren't necessarily even thinking about while being focused on the day-to-day changes and how they're pivoting their strategy overall to be successful. So, one area that I would think about is a lot of the companies, again, because of the sun setting of those tax credits are looking to potentially use new power generation technology. So a big conversation that we have quite consistently is a lot of these IPPs or independent power producers who were traditionally developing maybe a solar project who have those assets like the land acquisition, the different leases and contractual obligations and that position in the interconnection queue are now looking to use potentially something like natural gas generation or standalone battery energy storage systems, both of which have different strategies when it comes to that economic availability there.

So, one risk there is just the unfamiliarity with that generation and that technology and making sure that they have adequate expertise advising them on how they're generating those assets. The other one that I would think about is with the timeline and the huge squeeze there, again, we're seeing so much rush from a lot of these developers and owners to get their projects underway under construction meeting, the becoming construction timelines, that there's a lot of conversation with the industry that we want to ensure that there's a holistic approach on managing the risk of those projects. So like I mentioned, for example, with the supply chain itself, using new manufacturers and new capabilities there to avoid the FEOC restrictions, ensuring that equipment is going to be as resilient and able to withstand certain things like natural catastrophes as we've seen in the past. Other areas within this section that we're thinking about is like EPC contractors.

There's a finite number of those contractors that are available here in the United States, and even further a finite number of reliable and experienced contractors. So not cutting corners and being able to have a holistic view on developing these projects so that they have a long-term lookout on them and they are resilient for the lifetime of the project and being able to supply that power as they are intended to, which also leads to a contractual risk there when it comes to power purchase agreements and who the offtaker is. I think the last, not last area, but another area that comes to mind for me is the consolidation of the market overall. So, we are seeing a ton of these smaller developers or independent power producers that are being bought or acquired by larger companies. So ensuring that those portfolios are being looked at carefully, the due diligence is being done for them, and the economics are being carefully studied for, again, that longevity portion

of it is going to be a big challenge I think coming within the next year or so.

So, I think that there's a number of different ways that insurance comes into play here, right? With regards to these projects, we can always start with our basic coverage for our first party exposures, which is going to be your property damage, which also includes the loss of revenue through business interruption coverage. So that's going to cover the project itself and ensuring that that investment is being protected adequately. Then you have your third-party coverages, so your general liability, excess liability, auto liability, et cetera.

Typically, those are driven by, yes, the exposure of the project, but also typically contractual obligations. So many of the insurance products that are procured for these projects are going to be driven by the different contracts and the requirements that are imposed by those contracts. And largely we have EPC contracts, we have ONN, you have interconnection, but the large ones there that are going to really drive that is going to be the financing agreements from both debt and tax equity investors.

So, taking a very close look at where those obligations are coming up and ensuring that the projects are adequately protected is going to be continuously as important as it has been in the past. And then the other area that we think about with regards to insurance products is ensuring again that the project is going to be resilient. So, looking at natural catastrophe coverages, making sure that different perils are going to be addressed throughout those traditional coverages. And I think that another area that's emerging is going to be not necessarily insurance products strictly, but I would say risk management strategies on freeing up capital for these companies in this space, again, to help with reinvestment into future projects and helping with that margin on their existing portfolio. So, there's a number of different innovations that have emerged in the past few years that have really helped our clients in this space.

Again, free up that capital. For example, one of them is going to be what we call the interconnection security. So, this is a surety bond that mimics a letter of credit, and so it helps, and it doesn't require collateral. So, when it comes to the interconnection queue, each of the projects requires a security requirement to go through the different phases of the queue, and this can sometimes cost tens to hundreds of millions of dollars for each of those companies in the queue. So, by using this interconnection security solution, it actually frees up about 10 to 12% less costs to our clients compared to a letter of credit, which is typically what's used to securitize that position in the queue. So, this has been a huge innovation in this space, and we're continuously rolling it out and getting more and more markets, more and more off-takers to be comfortable with it.

But that has been a big moment here, especially given the squeeze that I've been talking about and the continued investment in the space. I would say another area that we are thinking about that's becoming increasingly questioned by our clients about the availability of is the tax insurance itself. So when it comes to the tax credits that are available on a per project basis, there's actually insurance that you can buy to help ensure that those tax credits will be realized or you'll be indemnified if they're not with regards to an audit or potential legislation changes in the future there. So those are a few and just two of many solutions that we're seeing. I would say one other one that comes to mind just really quickly is as we're seeing a lot of these projects go behind the meter, like I mentioned, especially renewables that are feeding the data centers, there's an exposure to those power generation owners on the renewable side to the data centers if they do not supply the power that they have agreed to supply to the data centers, which then causes a SLA default for the data centers. So, we are coming up with a solution to help protect the independent power producer or the renewable energy owner against that default there. So again, there's over 150 different products or advisory services that we as Marsh work with our clients on given their specific exposure and their challenges that we've seen. But those are a few of them that have made a huge impact as far as available capital and being more strategic again about that risk management solution there.

## Sarah Baldys:

Hey, as I have been listening to you both talking through the landscape, the legislative changes that all of these companies in this space have had, they're responding to and navigating as well as the emerging risks that you see incorporating new technologies, dealing with changes to timelines. And I do think a focus on that consolidation, potentially maybe some focus from the DOJ on antitrust in the energy and power space. And I think all of these trends and the risks and the landscape they're currently navigating, like I said with some maybe unforeseen or unexpected changes, all of these things are enterprise risk that can be sources and are actually commonly sources for renewables, companies of D&O litigation. So when we look at the recent trends over the last 12 to 18 months for directors and officers litigation against the companies powering the energy transition, we see them falling into a number of categories that I think correlate with these emerging risks you're talking about.

We see the sort of over promise and under-deliver type accusations missed or overly ambitious timelines, misstatements on disclosures about project readiness or where companies are, whether it's on for technology, maybe on a regulatory approval, and then also an uptick in some short seller activity. And with all of those changes in the pressures we've been talking about in your comments today, Katie, it really seems prudent advice for companies in this space to review their disclosure practices, really be thinking carefully, putting some extra care around public statements and all disclosures and evaluating their directors and officers liability limits. I think, and I would love your comments around this if you have them, but I think sometimes in the renewable space, management liability may not be a front burner concern for companies that have, they're

trying to get projects going and off the ground. However, I think it's always an exposure. It's an exposure for private companies as well as public companies. And certainly, the environment that you've described in which these companies are operating, this is a heightened exposure today, and D&O litigation can be very costly. So it seems like a time, as I said, to really look carefully at disclosure practices internally and make sure you are talking with your broker or partners on managing that exposure, but also reviewing your D&O limits and make sure that they're adequate given the current environment.

## Katie Burke:

Yeah, no, I 100% agree, Sarah. I think that that is a perfect example of what I was saying with regards to all of the emerging risks that are coming out. And I think that there is a little bit of oversight as far as taking a holistic approach and making sure that companies are thinking about all of the present risks and emerging risks. And D&O is a great example of that because typically, like I mentioned, the insurance that is procured by these companies is typically driven by their contractual obligations, and D&O is not typically going to be included in that from a project standpoint. So being able to have that 10,000 foot view as far as what you're doing as a company, where you're going, and the different actions that you're taking, ensuring that you're having those conversations with your broker, looking at it from a holistic view and making sure that you're approaching it from a strategic perspective to match your risk appetite as well, is going to be crucial within the next few months and year or so.

## Grace Brighter:

So, Katie, looking ahead, what advice would you give renewable companies clients in this space to prepare for future risks and potential insurance challenges?

## Katie Burke:

Yeah, thanks. I think that there are definitely a number of things that we've touched on and alluded to throughout this conversation, but I would say number one, again, make sure that as a company you have a holistic view and you're having those conversations with a trusted partner with your broker to assess where you are right now with your operations and then where you're going. So having that strategic plan, and although many companies are pivoting pretty quickly right now with regards to their pipeline or what they're going to do within the next year, and then also looking further, five to 10 years even really being able to articulate that and ensure that you are thinking strategically about where you're going. So that's going to be one of my main things. I also think that it's going to be crucial to have an understanding of what impacts the macroeconomic factors that we talked about are going to have long-term. So being able to have those conversations about different aspects of these operations, like your supply chain, for example, and have a deep understanding of who your suppliers are, where they might be moving different challenges with regards to that aspect, for example, is going to be largely impactful on not only your success, but how you're managing your risk going forward long term.

## Grace Brighter:

Well, thank you so much for your time today, Katie. We really enjoyed talking about all things renewables. It was great to hear the landscape today and discuss a lot of the legislation in this space, which has serious impacts on our clients here at Marsh. So, we really appreciate the time.

## Katie Burke:

Thanks for having me. I appreciate it.

## Grace Brighter:

That's all for this edition of Powered by Marsh FINPRO. We hope you enjoyed our discussion and thank you for listening. You can rate, review and subscribe to Powered by Marsh FINPRO on Spotify, apple Podcasts, or any other app you're using. You can also follow Marsh on LinkedIn or X. In addition to your podcast feed, you can find more episodes of Powered by Marsh FINPRO at www.marsh.com/poweredbypod and more insights from Marsh on our website, Marsh.com. Until next time, thanks for listening.