

# Wind debt finance trends for the inflation era

## IN THIS REPORT

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Equity and new private  
funding sources

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Short-term deals a rising  
option



# Contents

- 04** Higher costs of funding
- 08** Hedging costs rise
- 09** Keeping PPAs short and sweet
- 10** Retreat into equity
- 12** Shorter-term financing structures
- 14** Advice for developers
- 15** Finance costs the tip of the iceberg

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## Foreword

European markets have seen higher bank costs in some wind project finance deals as countries hike interest rates to contain record levels of inflation.

Project investors in the US have also taken note of the impacts of inflation on capital costs, finding that in some cases construction bank debt margins have become wider, as the costs for securities rise across the board. The steeper costs account for greater risks, among other things.

Meanwhile, bank margins on wind power projects are being tempered by their growing appetite to add more green energy spend.

Dynamic prices for both construction costs and revenues, all key inputs for stakeholders in wind project finance, look set to continue. This report explores the immediate solutions for investors.



**The EU's central bank has raised borrowing costs to their highest point in 14 years, following a parallel increase in the US.**

Wind project backers have braced themselves as the world's major central banks hiked interest rates faster than at any point in twenty years in the past year.

The hikes continued at the start of 2023, with EU and UK central banks announcing February interest rate hikes.

Around the same time, the US central bank made its eighth consecutive hike, bringing interest rates to the range of 4.5-4.75 per cent.

But the rate hikes, seen in at least 45 countries in the past year, have been largely uniform across all major economies apart from Japan.

The hikes are a response to the inflated prices seen by consumers following Russia's invasion of Ukraine. "The war in Ukraine and the market volatility that comes with it creates a lot of uncertainty, and for banks that obviously means higher risk, which banks have to price accordingly," says Piotr Nerwiński, a Banking and Finance Practice Partner specialising in renewable energy projects in the Polish arm of law firm Dentons.

Poland is among a group of countries that saw steeper rate hikes. In the country rates shot up to 6.75 per cent in February, Nerwiński notes.

Other countries that had high rates last June were Russia (20 per cent), Ukraine (15 per cent), Brazil (13.25 per cent), Sri Lanka (7 per cent) and Mexico (7 per cent).



In countries with higher interest rate hikes, the hikes mean a wider bank margin in debt deals to account for both the higher cost of borrowing and larger risks for wind projects. However, is not always clear to legal advisors how much of a bank's margin accounts for the interest rates and how much for the risks.

"In fact, it is the geopolitical situation as a whole and all the changes we are seeing in the market that are driving up pricing, resulting in margins that are slightly higher than we saw in 2021 or early 2022," says Nerwiński.

Some say war in Ukraine also worsened ongoing hyperinflation in places like Argentina (44 per cent) and Zimbabwe (80 per cent).

"Today, projects are more likely to fail because of inflation and factors like higher capex. And with fewer projects expected to be completed on time, banks have to price in that risk," says Nerwiński, adding, "And it is not just the high cost of financing that is hurting projects, but also inflation. All of this is causing some projects to be put on hold or delayed."

## Higher costs of funding

**The elevated cost of funding in Eurozone countries comes from banks using the six-month Euro Interbank Offered Rate benchmark, which had risen by around 3 per cent in February.**

Banks in Poland, which uses the Zloty currency, have seen the national interest rate rise by around 7 per cent. Lenders there have seen a steep increase in cost of their funding leading to wider bank margins in wind project finance deals, according to Nerwiński.

“This is a massive increase that is bound to have an impact not only on the availability of funding but also on financial models. Add to this the cost of Interest Rate Swaps hedging, which has also risen quite dramatically recently, and it is no wonder that some investors are finding it difficult to finance or even complete their projects. Of course, these circumstances also threaten new projects,” says Nerwiński.

In addition to higher bank margins in Poland, Dentons is also seeing higher borrowing costs in some other jurisdictions where the cost of funding is in US dollars. Nerwiński noted that some investors in the US had seen higher borrowing costs.

Reflecting on the current US debt market in a January webinar, Beth Waters, Managing Director, Project Finance Americas at Mitsubishi UFJ Financial Group, said, “What has happened over the year, starting last spring, was the market was extremely aggressive on pricing and what started happening is banks’ cost of funds were going up ... So now I’m seeing say 125 [basis points] would be the lowest on construction financing. We’re not doing anything lower than that.” She noted the basis points had increased from a year ago and that because of the high cost of funds, some bank margins were higher.

“There are a lot of banks out there, a lot of appetite, but our cost of funds is affecting our decision-making ... It’s coming back in a little bit, but we don’t know where it’s going,” continued Waters, later adding, “The pendulum is now swinging in favour of lenders. It hasn’t been that way for a long time.”

Keith Martin, Co-Head of Projects and Partner at law firm Norton Rose Fulbright in the US, said in February that construction debt prices, reaching 125 to 150 basis points over the American daily Secured Overnight Financing Rate, had risen 75 to 90 basis points a year ago.

However, he did not think this would lead to a financing slowdown for US wind projects. “Labor shortages and inability to connect new projects to the congested US grid are bigger issues,” he says.

“It is the geopolitical situation as a whole and all the changes we are seeing in the market that are driving up pricing.”

Piotr Nerwiński,  
Dentons





“If there is a slowdown in US wind projects, it is due to labour shortages and continuing supply-chain issues rather than lack of banks’ will to lend. There are 90 banks chasing deals in the US project finance market,” continues Martin.

He says that wind debt service coverage ratios have not changed, and revenue typically should be at least 1.3 times the debt serviced. Unlike in Europe, American wind project debt is back-levered and subordinate to tax equity finance, a market that is expected to grow under the new Inflation Reduction Act.

In some parts of the Eurozone, for example Germany, finance for wind is also seen as readily available. There, bank margins look stable to lenders.

Dutch-headquartered bank ABN AMRO Managing Director, Project Finance, Lisa McDermott says competition in the market in Northwest Europe has kept lending rates low. “It is not across the board: We’ve seen margins in some sectors go up, for instance, digital infrastructure lending. But there’s less liquidity for that sector than for renewables. The conventional renewables deals are still being compressed on margins, despite interest rates rising,” she says.

In other parts of the Eurozone, the interest rate hikes coincided with increased bank margins. “For instance, in Spain the market seems to have recognised somewhat of an increase to reflect the increase in the underlying cost of lending by banks, but in the more overbanked renewables markets, like Northwest Europe, the higher costs are not being fully passed on. Banks are, in some way, subsidising lending to the sector due to the high demand for green assets,” says McDermott.

Sometimes, smaller deals might actually have an edge over larger ones in terms of bank margins. “Where we tend to see margins going up a little bit or terms being more attractive is when you need a lot of liquidity

in one deal, so the bigger deals. However, if a deal is very small, then operational costs for lending may weigh too heavily against the returns, so lenders will deploy their capital where they can make a better return. But from what we are seeing, wind deals of 50MW and similar – on the smaller size – are still being funded quite easily. If I look at the Dutch market, there is a lot of lending appetite, even for smaller scale projects, and they are being funded on very, very competitive terms,” McDermott adds.

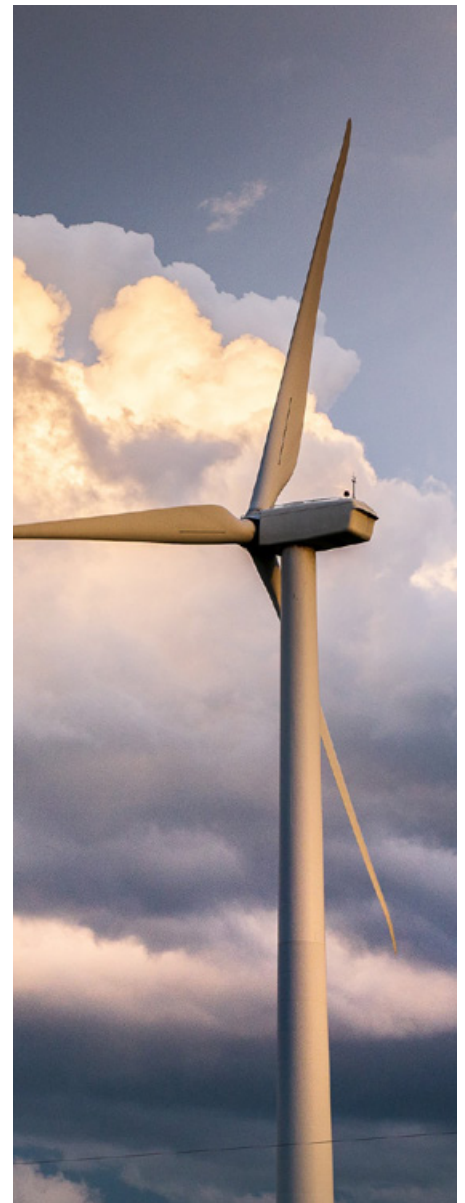
Waters also commented on margins for banks in small deals in the US market. “The smaller the deal the more aggressive the terms you could get, because you have certain banks whose cost of funds are lower, and can quote lower, and the bigger it gets, you got to get the last guy in so the pricing will trend upward, because of peoples’ cost of funding being high.”

Jérôme Guillet; Enterprize Energy Board Member and Founder of advisory firm Green Giraffe, notes that inflation impacts vary project-by-project because of their individual agreements on the cost of funding, cost of supplies and cost of electricity. “You have very one-sided movements of the cost of money and the cost of certain goods. It’s going to impact some people positively and others negatively and others not at all. To some extent, it may even be a matter of luck.”

Inflation hurt projects that were at a certain point the financing process when the inflation hit, says Guillet, explaining, “The people that are being squeezed right now are those that have revenues that were fixed, defined before the interest rates increased, or before the need arose to deal with inflation and increased costs with the same revenue as before.”

“There can be a gap between the moment when the price for the electricity you sell is set and when your costs are set. That’s a risk that happens under some regulatory frameworks, and it’s a difficult one to protect against,” says Guillet.

Trade body WindEurope found that inflation-driven supply chain costs, lower revenues, and regulatory intervention were to blame for a 47 per cent year-on-year drop in wind turbine orders across the continent last year.



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**Jérôme Guillet,  
Enterprize Energy**



# Hedging costs rise

**Prior to today's inflation, few wind developers in Europe had hedged against interest rate risk using contingent Interest Rate Swaps because they were not cheap.**

"If developers hedged against interest rate movements, they can now say that they were prudent to do so. But to large extent developers that are on the right side of these recent price movements were lucky and those on the wrong side, unlucky, as they were largely unexpected," says Guillet.

The cost of debt increased simply because of increased central bank rates and volatility he says. "But again, that's not something that is controlled by the players in the market. It applies uniformly to everybody," he notes.

In parts of Europe like Poland, the cost for Interest Rate Swaps has increased to such an extent that it has required reworking project financial models, on top of other financing pressures. "Add to this the cost of interest rate swaps hedging, which has also risen quite dramatically recently, and it is no wonder that some investors are finding it difficult to finance or even complete their projects. Of course, these circumstances also threaten new projects," says Nerwiński.

New hedging costs have compounded developers' financial worries. "Lenders are requiring borrowers to enter into long-term Interest Rate Swap hedging arrangements, which have now become very expensive. So investors are looking for alternative hedging strategies, such as shortening hedging periods and looking for better opportunities within five- or seven-year-timeframes, rather than the traditional long-term hedging periods of 10 to 15 years that used to be the norm," says Nerwiński.



# Keeping PPAs short and sweet

**With inflation on the rise, wind players are paying more attention to PPA terms as a critical part of their revenue strategies.**

Hikes to electricity prices due to inflated fuel costs may either benefit or harm PPA-linked project economics, depending on whether they are accounted for in the terms, tenor and timing of the PPA.

Projects heavily relying on merchant revenue or a zero-bid tender may be in a situation where, depending on in what power market and under which terms their PPAs have been agreed, they find themselves in more favourable position in terms of profitability, says Guillet.

Some developers are making hay while the sun shines by targeting long-term PPA contracts. “Something to watch however, is where a large amount of capacity is being sold via a PPA against a flat price, not a price that is inflated. That can cause a really big mismatch between revenues and costs. If you were selling power into the spot market, it would be against a price which is inflated,” says McDermott.

“Some sponsors want to be quite conservative and fix their power price exposure long-term, which is typically helpful from a financing perspective. However, that needs to be done sensibly to prevent an inflation mismatch,” McDermott says.

“But a more common tension we typically face is where sponsors want to go more and more merchant and hedge a lower percentage of power sales,” McDermott says. “A good balance for financing is fixing the majority of power sales via a PPA but leaving some exposed to the merchant power price market. This allows some equity upside from merchant power price exposure, but also hedges both inflation and production risk where a minimum generation requirement is in place,” adds McDermott.



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**Lisa McDermott,  
ABN AMRO Bank**

Nerwiński notes the electricity price instability could potentially disrupt the trend towards long-term merchant exposure. “Some off-takers, well aware of the volatility and high prices in the market, are balking at the idea of contracting power for 10 years at high prices, seeing the situation as unsustainable, and prefer to buy power for shorter periods of one to two years, even if this is a more expensive solution, before returning to discussions about long-term PPAs,” he says.

The current environment encourages wind developer dependence on either auctions or PPAs rather than moving to full merchant exposure, he adds.

## Retreat into equity

**In general, the increase in the cost of capital applies to both equity and debt, and is a setback for all wind investment players obtaining capital.**

“The cost of capital increase applies to everybody largely in the same way, so it doesn’t hurt the smaller or the big guy more,” says Guillet.

The cost to obtain equity has also increased. “So basically, the impact of the increase in the central bank rate is pretty much a one-to-one on the cost of capital for projects,” Guillet says.

Nonetheless, in Poland where debt finance is less available to small developers, the situation is spurring a hunt for more sources of equity. “The two immediate consequences of the current situation are more expensive financing and less leverage that can be expected from banks. This means, for example, that the smaller developer has to put more equity into his project,” says Nerwiński.

“It is the smaller developers who, in most cases, are not able to finance their entire projects with equity, but still have to provide equity to pay for 50 per cent or at least 40 per cent of their investment. This is significantly more than in the past, and it is understandable that the smaller



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Dentons**

players are now more interested in finding new investors or new equity for their projects, if only because banks tend to lend less money than they used to," Nerwiński continues.

The lack of availability of cheap bank debt in Poland has opened up a demand for new private debt sources, for example from institutional investors and even IPPs. "This is also a good time for private debt players to come into the market. We are seeing projects financed by private debt, which is even more expensive but quicker to obtain, and quite often available in euros rather than the currency in which the project collects its revenues. This structure is not without its advantages," Nerwiński says

Traditionally, private lenders only participate in a few mezzanine bridge structures because senior debt is quite cheap. However, Dentons in Poland is currently working on a private transaction model that eliminates the need for all traditional senior bank solutions.

"We have seen some new players opening new private debt funds or expanding into other jurisdictions, not just in the renewables sector but in the economy as a whole. This is definitely a good time for private lenders and an interesting development to watch," says Nerwiński.

Dentons has seen a model where equity can be used in the short term because local prices for equity are getting closer to the price of debt financing. However, equity could be replaced by bank debt when markets are more stable, perhaps three years from now.

On the subject of whether equity investors are feeling similar return pressure to banks, McDermott says that equity providers would also need to see higher returns as their cost of capital goes up, explaining, "If they can get the same return from a government bond, why would they invest in a riskier asset like infrastructure?"

Big players in wind investment are still finding plenty of debt financing available. "If you have a good, well-structured project, project debt can easily be raised in today's market. However some sponsors which have very strong ratings or which are owned by a state entity can raise corporate debt very cheaply, so will prefer to finance projects with equity rather than raising project finance, which is both more complex and more expensive for that type of name. But very frequently, there is at least one party in a consortium that hasn't got that type of rating profile, so they will prefer, or require, project debt," says McDermott.

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Dentons**

# Shorter-term financing structures

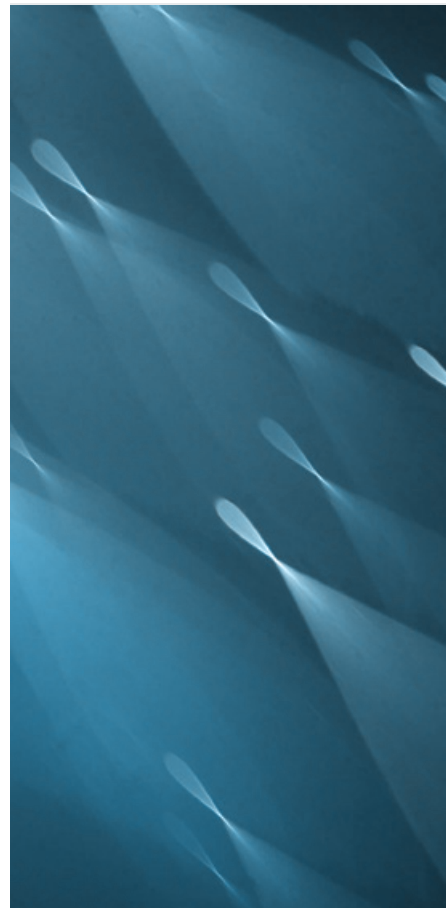
**Mitsubishi UFJ Financial Group’s Waters, speaking about renewable energy project finance in American markets, had seen construction-plus-five and construction-plus-seven-year loan tenors.**

“I think it has a lot to do with cost of funds for banks. That’s one of the big issues these days. So tenors are coming in and we get better pricing for shorter tenors,” she says.

In his corner of Europe, Nerwiński adds, major developers would be well advised to consider some short-term financing structures, even if they have access to debt finance. For example, they could fund their projects with equity and wait for better times.

“There is a lot of discussion now about financing for the construction period plus a year or two, rather than the usual 15 to 18 years, so that investors can complete their projects, actually see the revenue levels that the projects are capable of generating, wait a year for the final wind measurements to come in, and only then think about refinancing their projects or extending the existing financing arrangements with some good PPAs that will secure their revenue streams. This can be an interesting alternative to traditional structures,” Nerwiński says.

Another emerging trend, particularly among some of the larger players, is group-level financing, Nerwiński notes, saying, “Investors are looking for short-term financing to get them through the first two or three years, start their project with equity and wait for better times to raise debt to refinance their projects.



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Dentons**

“They are no longer seeking standard senior bank financing, but are relying on their equity first, with a view to financing their projects with debt later on, a year or two after the construction phase is completed,” says Nerwiński.

Refinancings could follow a similar short-term trend in Poland. “Projects financed under long-term arrangements will simply continue under the old terms in these unfavourable circumstances. But where debt maturities are approaching, at least some refinancing is a must, and decisions will have to be made whether to opt for shorter-term financing, private debt or some other alternative,” Nerwiński says.

On the whole, however, there is no end in sight for refinancings. “There’s a general trend to do refinancings and it’s certainly not going to be stopped by this situation. And the fact is that when you refinance, you can still keep your old, low underlying cost of money, and that is going to make these transactions more attractive than greenfield. So maybe, relatively speaking, there will be a few more refinancings,” says Guillet.

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**Jérôme Guillet,  
Enterprize Energy**

# Advice for developers

**The developers, investors and IPPs active in the wind sector, as well as their advisors, may need to prepare for more lengthy negotiations.**

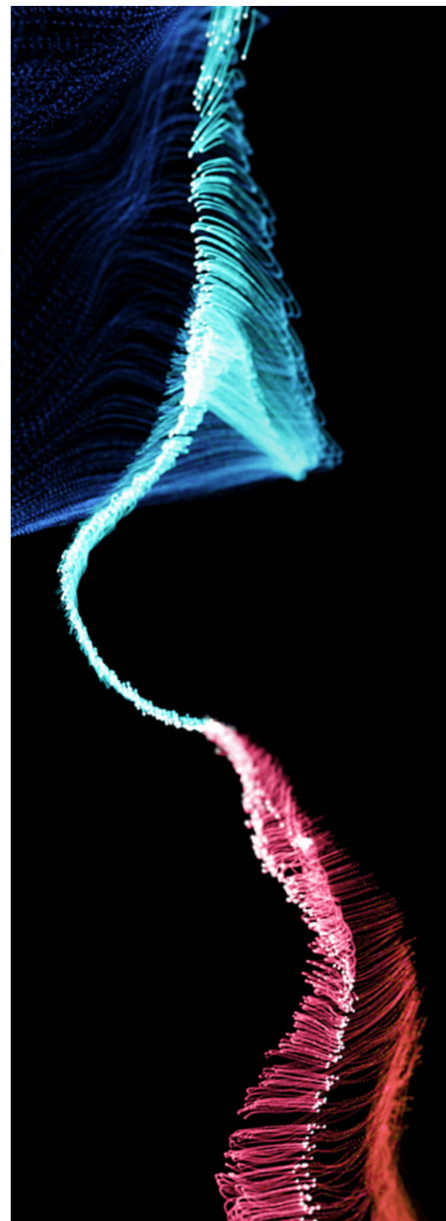
“In general, all investors, developers and banks should be more flexible and willing to spend more time structuring financing than in the past,” says Nerwiński.

This could last for several years in affected areas. “In my opinion, the days when we had mostly plain vanilla transactions, very similar to each other, with a lot of renewable energy projects to be financed almost like commodities, will not return for another two or three years,” he continues.

“And it is the lawyers who now also have a huge role to play in bringing together all the parties to the transaction, I would say that in the initial stages of structuring a transaction, you will probably need an extra three to six months to talk to a larger number of banks compared to the previous market situation,” says Nerwiński.

The need to allow for extra time carries over into syndication. “You have to knock on more doors before you can put together a good syndicate for financing. And that takes time. You may need to discuss in advance how your equity will be injected and whether the banks have any special requirements, and these additional discussions can be quite lengthy,” Nerwiński says.

McDermott’s advice to developers is to fine-tune their revenue strategies. She says, “There are ways that you can structure your financing and your offtake to optimise returns, but at the same time deliver a bankable project which does not seriously increase risk for the financing parties and thereby access attractive lending rates.”



**“There are ways that you can structure your financing and your offtake to optimise returns...”**

**Lisa McDermott,  
ABN AMRO Bank**

# Finance costs the tip of the iceberg

**Despite a confluence of regulatory and cost risks, Nerwiński is optimistic about the future of wind investment in Eastern Europe.**

“There are no realistic alternatives to renewables in Poland. We have to phase out fossil fuels, including coal, and renewables will grow despite all the challenges we face now. We will increase the share of renewables in the electricity mix, I am sure of it,” he says, adding, “In fact, renewables are growing in Poland, despite the myriad of challenges. The same can be said for some other countries, such as Romania, which have become quite interesting for investors. I know of a number of noteworthy projects being developed in the Balkans and in Bulgaria, so I will not succumb to pessimism just yet.”

While Guillet expects some projects to renegotiate their power prices, he does not think that the availability of capital will be limited, but rather capital costs will be higher and that will be reflected in the higher power price negotiated in auctions or brought to market.

“So, you’re likely to see a bump in tender and auction pricing, all other things being equal,” he says, adding, “but for sure greenfield projects will still happen.

“The project economics are going to move a little bit. If they’re able to pass that increase on into their prices, they will do so,” says Guillet.

“Contracts for Difference prices will probably move up a little bit, by maybe 10-20 per cent. So if instead of €40 per MWh, you get €50 per MWh, maybe even smaller changes than that. Those that have increased costs but cannot increase their sale price will see a drop in profitability. A few may decide to abandon their projects, but that should be a minority – in all likelihood they will try to negotiate with their suppliers to share the pain,” he says.

For some in Europe, the cost of capital is not wind’s main boogeyman. Even with inflation-driven costs affecting project economics, the fate of the wind finance market still rests largely on the shoulders of regulators imposing price caps, they say.



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Enterprize Energy**

Starting on 15 February, the EU required states to cap the price of electricity when the Title Transfer Facility exceeds €180 per MWh for three working days, aiming to control volatile electricity prices. The move followed price caps imposed by several EU states.

Poland is one country that had imposed more severe price caps. “In my view, regulatory risk is paramount. Financing costs or higher project costs can be managed in a variety of ways, but regulatory uncertainty precludes predictability in terms of price or revenue stream security, and that can cause some investors to automatically put their projects on hold,” Nerwiński says.

McDermott agrees that visibility on the future regulatory environment is what is needed to grow renewable energy investment. “There is an ongoing dialogue about redesigning the electricity market in the EU, to decouple electricity pricing mechanisms from gas. That, as well as the recent price caps and windfall taxes, has resulted in a lot of regulatory intervention, even in private markets. That makes it really difficult to navigate, especially in an environment with interest rate rises and high inflationary pressure,” she says.

The price caps and similar interventions cloud long-term investment horizons, McDermott concludes, saying, “There are a lot of good tailwinds for the [wind] industry, also supported by very high renewables targets within Europe. But you can’t keep raising targets and at the same time handicap projects, or make them have to constantly re-evaluate their business cases. That’s not how we’re going to accelerate.”

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