

THE SECRET TO CUTTING WIND'S BIGGEST OPEX COST

MAY 2022

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Paolo Grossi, Executive Vice President, Commercial, at Galileo Green Energy

Isaac Vaz, Investment Director at InfraRed Capital Partners

Sam Goss, Head of Investments at Octopus Renewables

Ray O'Neill, Chief Operating Officer, SkySpecs

Kevin Lynch, Chief Executive Officer at Source Energie

Scott Mackenzie, Head of Asset Management at SUSI Partners

Executive summary

Europe's wind energy sector is entering uncharted territory as inflation rears its head for the first time in two decades. Thus, the new environment is prompting companies to look more closely at portfolio management.

And while rising wholesale electricity prices may offer opportunities to offset rising costs, developers of new projects may be caught in an environment where inflation does not apply to their revenues but will apply to their opex and capex.

If so, the inflation assumptions that underpinned their original routeto-market strategy may no longer be valid, resulting in a squeeze on developer premiums. The opposite could be true for existing projects which are far more likely to have indexed linked revenue lines.

Meanwhile, a trend to lock in long-tenor original equipment manufacturer (OEM) operations and maintenance (O&M) service agreements, to mirror the project finance tenor, may be leaving value on the table for the sake of minimising the downside risk for banks.

This paper, which draws on comments made in a Wind Investment Boardroom debate, hosted by Tamarindo Group's A Word About Wind in partnership with SkySpecs, looks at the drivers and issues with this trend and discusses how some far-sighted portfolio holders are adopting an alternative approach.





Introduction: inflation ahead

Europe is seeing a level of inflation that is unprecedented since the introduction of the euro.



Euro inflation since launch.

Source: Tradingeconomics.com/Eurostat

At the end of April, the European Union's statistics agency Eurostat warned annual inflation in the euro area was at 7.5%¹ as an economic bounce-back from the coronavirus pandemic clashed with supply chain shortages exacerbated by a lengthening conflict in Ukraine.

This is nearly twice the previous eurozone record of 4%, seen during the 2000s.² And the main culprit is energy pricing, where inflation hit a staggering 38% in April, according to Eurostat.

Runaway energy price inflation is almost entirely a fossil fuel issue, with concerns over Russian oil and gas supplies to Europe adding to gas-related shortages that had already been a feature of global markets for several months.

¹ https://ec.europa.eu/eurostat/documents/2995521/14497757/2-29042022-AP-EN.pdf/664dc8bd-4460-46f6-69ea-04c1763abd28?t=1651154566195

² https://tradingeconomics.com/euro-area/inflation-cpi

The industry response

This is a new environment for renewable energy developers, which have achieved scale over the last two decades amid low-interest rate conditions across Europe. Inflation "is an issue that we never had to deal with before," says Kevin Lynch, Chief Executive Officer at Source Energie.

"The first projects we built were reasonably protected from inflation," he says. "As developers, we see inflation start to turn up now. We all hope that inflation is going to be a blip of maybe two or three years and if that's not the case then we have to respond with a revenue proposition that incorporates protection against inflation."

Now that a growing number of European wind projects are subsidy free, this will likely involve negotiating corporate power-purchase agreements (CPPAs) that allow for inflation, Lynch says.

Inflationary pressures are adding to existing concerns around equipment supplies—more in solar than in wind—and currency issues. Failing to allow for inflation in PPAs could lead to significant margin erosion as the cost of equipment, labour and any other inflation-linked costs go up.

But provided inflation follows energy prices, there is also a significant opportunity for developers or asset owners to make money. In the short term, asset owners can make higher revenues while developers are prospecting projects.

Indeed, the high energy price environment is adding to previous increases in investor demand and shortages of project supply and encouraging investors to get involved earlier on in the development cycle, according to Isaac Vaz, Investment Director at InfraRed Capital Partners.

"The pace of project development doesn't match the appetite to fund them," he says.





Long-term service contracts

The challenge, says Scott Mackenzie, Head of Asset Management at SUSI Partners, is to ensure exposure to cost inflation, on finance as well as materials and components, is limited. "Owners need to do whatever they can to improve the cost base," he says.

"Sometimes people have tied themselves into a 20-year deal with an OEM contractor with automatic inflation built into it, so they've got nowhere to go when it comes to improving," he says.

"If you negotiated a break or a shorttenor, five-year service agreement, at least you know you have got a leverage point at the end of that where you can renegotiate."

But 20-year OEM service deals are becoming the norm in the European wind industry. December 2021 data from the analyst firm BloombergNEF shows the average age of OEM operations and maintenance (O&M) contracts has been growing steadily since 2017.

In Sweden, for example, all turbine supply deals last year included service contracts of 20 years or more. The vast majority had O&M contracts for 25 years or more, despite most turbines only having a certified design life of 20 years, according to BloombergNEF.

O&M contracts of 20 years or more are also typical of Poland, Netherlands, Finland, France and Belgium. This naturally suits OEMs since it creates recurring revenues for the lifespan of the turbine. And long-term O&M contracts can also seem attractive from a bank's point of view, especially as asset owners face growing complexity.

European wind investors and developers used to just worry about installing turbines and collecting feed-in tariffs. Nowadays, however, portfolios increasingly incorporate a range of assets, including perhaps solar and energy storage, and often are diversified with a mixture of CPPAs, PPAs and merchant projects.

This diversity helps guard portfolio performance against challenges such as inflation. But with so many variables, it could be tempting to simplify O&M with an extended OEM service contract.

A risky route?

On the surface, having a long-term OEM service contract might not seem like a bad thing. OEMs understand their turbines better than anyone else and are well placed to supply spares and specialist personnel.

But this logic overlooks the fact that OEMs also make significant margins on their service contracts. Most OEMs offer banded service contracts with price increases at regular intervals, for example at three, five, 10, 15 and 20 years after commissioning.

Each of these increases can be in the order of 11% to 18% above the previous price band. Over a 30-year period, the price of a full-service contract can rise by 90%, according to BloombergNEF. "Long-term deals look great when you're doing the financial model and you want certainty for 20 to 25 years, but that was probably based on a 2% inflation assumption," Mackenzie says. "Maybe making sure you've got a bit of competitive tension in your projects is a good thing. Don't lose that by signing up for 25 years."

Georg Hoefler, Head of Renewables Transactions at Allianz Capital Partners, agrees that signing longterm O&M contracts as part of OEM package at RTB might not be a wise strategy in the current climate. "At the moment, you have a very volatile environment with turbine price increases, supply chain disruptions, and higher interest rates which also limits the debt you can get on projects, and hence you might want to keep some flexibility," he says.

"It's very much a question, on new projects, of how to design the structure in a way that gives you confidence," Hoefler adds. "Inflation is a problem for new developments. Existing assets have to be looked at on a case-by-case basis, as they might also benefit from inflating revenues."



A different approach

European developers' love of long-term OEM service contracts differs markedly from the approach in the United States, where financing is driven by tax equity structures that typically have seven to 10-year tenors.

This forces portfolio holders to review asset management strategies on a regular basis. Over time, US developers tend to take servicing in house rather than relying overly on extended OEM warranties. BloombergNEF data shows 20-year service contracts accounted for less than 40% of the US total in 2021.

Most US contracts were for 10 years. This gives US developers tighter control over turbine O&M expenses, which are the biggest operating costs in a project. Hoefler, at Allianz Capital Partners, says expanding this style of asset management in Europe is likely to be easier for larger portfolio holders.

"It depends on the risk profile of the investor and requires a certain size of organization and portfolio to have the required capabilities and leverage over banks and manufacturers," he explains. "One reason there is often a long-term O&M contract is because developers get the turbines cheaper as part of an initial package."

Allianz Capital Partners has itself opted to reduce the timeframe for new OEM service contracts, taking advantage of products and technologies that make it easier to introduce hybrid asset management strategies. "We have seen a huge evolution in services and what you can achieve in your portfolio," Hoefler says.

InfraRed Capital Partners, the investment manager for The Renewables Infrastructure Group, one of the UK's largest developers, has similarly moved to limit its exposure to long-term OEM contracts.

On merchant plants, says Vaz, "I'm not necessarily going for a 20-year contract. We could still do 'long' but what we might to then is move from full to limited service. We've done that already with a few of our assets. It is getting easier with time."

Looking to the future

For better or for worse, the new inflationary environment is underscoring the need for wind developers to remain flexible and nimble in the face of changing circumstances.

Long-term OEM service contracts may not always coincide with that need for cost-effective asset management, particularly since such agreements usually only cover availability and do not necessarily help to optimise portfolios for financial performance.

This distinction could become more important as portfolio owners look to address new market opportunities

that may depend as much on the flexibility of assets as on their availability. Lynch at Source Energie says that in larger portfolios, "the role of the asset manager becomes more important."

Increasingly, he says, asset managers must shadow the OEM and understand the data as well as the vendor does, to squeeze more performance from the assets beyond

simple availability targets. Fortunately, asset managers now have a wide range of tools with which to address this challenge.

SkySpecs platforms such as Horizon Fleet Management and Horizon Blade Management can take care of O&M while Horizon Finance provides enterprise resource planning capabilities to match performance with financial outcomes.

Conclusion

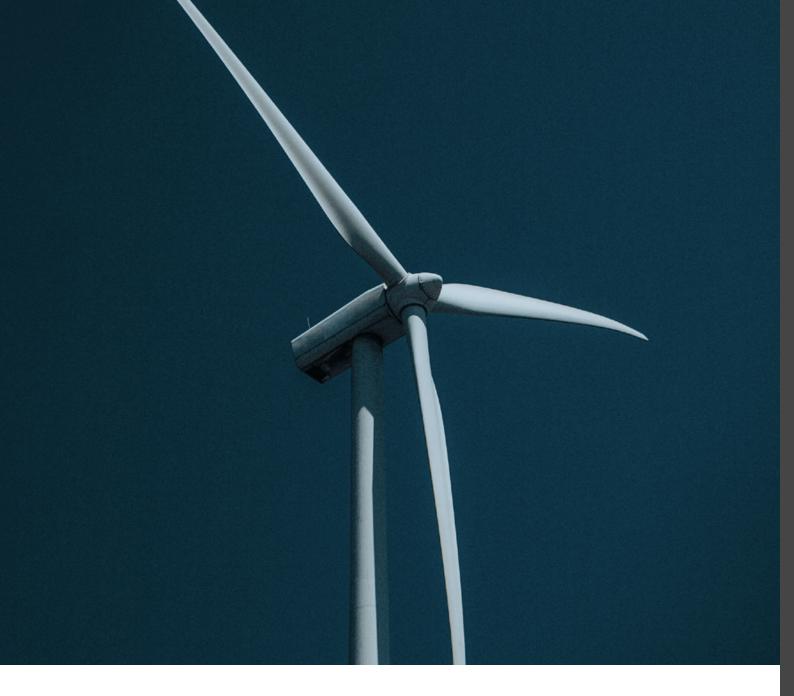
Today's market conditions should not come as a surprise to wind developers, says Sam Goss, Head of Investments at Octopus Renewables. "We expected inflation for a long time," he says. "It didn't come, it didn't come... now here it is. This is when diversified strategies come into their own."

Part of this diversification will come from revenue streams, says Paolo Grossi, Executive Vice President, Commercial, at Galileo Green Energy. "Renewables can more and more try to access markets which were not available, like capacity and ancillary services but also balancing, even leveraging on coupling with battery storage," he says.

Revenue is only part of the equation, however—managing costs is another important task in an inflationary environment.

As project lifespans get longer, it is reasonable to question whether it makes sense for asset owners to be locked into decades-long agreements that can lead to an almost doubling of O&M costs, purely because that makes things easier for the banks, when there are tools available and plenty of evidence to suggest shorter contracts are better.





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