

ESG Now Podcast

“Tilting at Wind Turbines ”

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Margarita Grabert

Hello and welcome to the weekly edition of ESG Now, the show that explores how the environment, our society, and corporate governance affects and are affected by our economy. I'm Margarita Grabert. I'm one of the show's brand-new co-hosts. I'm technically based in MSCI's Frankfurt office, but like any good modern podcaster, I'm recording this in my lounge, buried underneath a complex arrangement of sofa pillows and blankets. Mike and Bentley are somewhere pretending to be doing something important, but you'll hear from one of them again next week, so don't start getting too sentimental.

On today's episode, we are going to be getting into renewable energy and specifically the market for renewable energy. Because despite what seems like unending enthusiasm for renewable power and climate action, one of the market's biggest companies, wind energy giant Ørsted saw a fairly sizable drop in its share price just a few weeks ago. As we dig into the story, we'll take a look at what this means for Ørsted, why this turbulence is playing out, and whether it'll have any long-term ramifications for global net zero ambitions. So thanks for joining me today. Let's see where this story takes us.

So just a few days ago, New York was awash with policymakers, regulators, and investors as Climate Week descended on the city. It's a week that is filled with hustle and bustle and lots of panels and speeches from both UN representatives, but also policymakers, NGOs, and investors. It's an event that captures the urgency and intent of many different stakeholders to do something about climate change. In this year's Climate Week, the UN's Climate Champions highlighted the importance of non-governmental stakeholders in driving a transition to net zero. And a large part of this will include the clean energy transition and how innovative projects could accelerate both the development and integration of clean energy, all with the aim of tripling renewable energy capacity by 2030. And although the challenge of mitigating climate change is getting bigger, there are some developments that are making concrete action easier, and it's showing.

In the first half of this year, the EU hit a record low for fossil fuel demand, and at the same time, 17 EU countries hit record highs for renewable generation. And this trend might only be strengthened by key new policies like the US Inflation Reduction Act and the EU Green Deal Industrial Plan. And while on paper this might make it sound like everything is rosy for the renewable sector, it really hasn't been. Renewable energy companies have been dealing with some pretty big bumps in the road towards net zero. And maybe one of the bigger companies dealing with one of the bigger bumps is Ørsted. Ørsted is one of the largest global developers of offshore wind and has an installed capacity of around 8.2

gigawatts. To put this into perspective, one gigawatt can provide energy to power around 750,000 homes.

And in late August, Ørsted saw its share price drop by 25%, the biggest plunge since the company's IPO in 2016. Something that would definitely have caught the attention and nerves of investors and something that seems diametrically opposed to the idea of rising demand for renewable energy and policy support. So, to try and square this circle to try and figure out if Ørsted is a canary in the coal mine, I wanted to dig a bit deeper, both into energy markets and Ørsted itself. To do that, I managed to snag Elchin Mammadov out of MSCI's London office. Elchin started off by telling me about the role that renewables are playing in the broader energy market.

Elchin Mammadov

If we take renewables demand, the demand is growing and will continue to grow in the next few years for sure, and the demand growth is likely to accelerate in our view. If we take Europe as an example, the demand for renewables, both wind and solar, has grown quite strongly this year following the trends of the previous years. And what's renewables are doing are displacing coal and partly gas. The coal use have declined 21% in first half, compared to a year earlier, and the gas use continues to decline since Russia's invasion of Ukraine began, and we've seen a permanent displacement of gas demand among industrial consumers. We've also seen electrification boosting the demand for electricity and by extension for renewables, so good days for renewables demand and maybe not so good for fossil fuels, at least in the medium term.

Now, when it comes to profitability, it's a completely different picture. We've seen the profitability of wind and solar particularly come down, and there are many reasons for it, and we've seen that in the share prices of wind and solar companies that are in the sector. Most of those stocks are down both year-to-date and over one-year horizon. By contrast, oil and gas producers and even some coal producers, their shares are up both a year to date and over one one-year period. This is largely due to an increase in commodity prices, particularly oil prices, which is trading above \$90 per barrel, so not so good times for renewable shares, and maybe the opposite for fossil fuels at the moment.

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So as Elchin tells it, renewables are taking up a bigger slice of the energy market and helping countries shift away from fossil fuels. In the first half of 2023, we saw the EU using 17% less fossil fuels to generate its electricity. And this is paired with data from the International Energy Agency, which found that renewable energy capacity additions rose by 13% in 2022, or nearly 340 gigawatts. But many investors will know that these top-line numbers are not telling the whole story. Sure, solar PV technology did break a deployment record last year with net new additions of nearly 220 gigawatts, that's a 35% increase from 2021. But for wind energy, the story has been a little different. It's been a little more huffing and puffing to try and keep up with the pack. Between 2021 and 2022, annual wind capacity additions actually fell by 21%, making it the second year in a row that it's been falling after record expansion in 2020.

And if eyebrows were starting to rise because of these numbers, Ørsted's no good, very bad August would only have nudged them higher. And to throw in a little history here, Ørsted itself has maybe felt like a bit of a long shot from the outset. Originally, an oil and gas company and one of Denmark's largest suppliers, the company flipped the script in 2009 and made a hard pivot to renewables, heavily focused on offshore wind. At the time, the cost of producing wind energy was high, and big questions were raised around the profitability of this bold shift. But the company persevered, and by last year had 85% of its total capacity coming from renewable sources with energy costs that were comparable to that of thermal coal generation, leaving Ørsted as one of the biggest global suppliers of offshore wind. But instead of riding happily ever after into the sunset, the company is navigating a big price drop. So I asked Elchin to take me through why this drop happened and whether this risk might be affecting other wind energy producers as well.

Elchin Mammadov

This is definitely not Ørsted specific issue, but the issue for the whole offshore wind industry, Ørsted is a leading play in that sector, so that's why there's so much attention to this profit warning. But yeah, the issue is industry-wide, and it's due to the fact that the cost both of borrowing and of equipment and of labor are going up because of rising inflation and interest rates. At the same time, there's been supply chain issues, which led to delay in getting the equipment in place like particular turbines and foundations in place. And because all of that, it's delaying the time when this Ørsted and other offshore wind developers start earning their revenue. So the cost went up more than 40% for some projects. The start of the project has been delayed because of the supply chain issues and shortage of components, right? At the same time, the price for the power that those projects were going to generate has been fixed during the auctions that happened a while ago. So that led to a lot of these projects suddenly becoming uneconomical.

We've seen Iberdrola in the US and Vattenfall in the UK cancel some of their offshore wind projects already. And a bunch of offshore wind developers, including BP, Equinor, Total, Shell, and others, they are trying to renegotiate their contracts because they say that the cost went up and we're facing the

delays. So it's up to the regulators and policymakers to decide whether they're happy to accept this higher cost, which will eventually be paid by the consumers, or push back and risk some of these projects not materializing. The Biden Administration has a target of 50 gigawatts, I think, of offshore wind by 2030.

UK has a target of 50 gigawatts. There are talks that these targets might not be met because of these headwinds. But let's put it into perspective, right? So Ørsted, after profit warning, the share price over the past month is down 30%, yes, but the valuation of Ørsted, it's still more than double on a P/E or on an EV-to-EBITDA basis compared to oil and gas majors. So, the market still puts higher value on pure-play renewable names of which Ørsted is one. So that probably signals that the outlook for the sector over the long term is quite bright despite the current hiccups.

Margarita Grabert

Okay. So overall, Ørsted is trying to shuffle against a few different headwinds, supply chain delays, rising interest rates, and fixed price contracts, each playing their part and all of them are making it more challenging to deliver on the company's offshore wind projects. And as Elchin mentions, this is not a unique scenario for Ørsted. One of the company's largest competitors Vestas Wind Systems has also seen some sustained downward pressure on its stock price. And this difficulty is rippling through the broader value chain. Suppliers of wind turbines are also facing operational and supply chain challenges that reinforce those of power producers. Towards the end of June, Siemens Energy, a major supplier of renewable technology and equipment had an overnight price drop and valuation loss of around \$8.1 billion.

And to be fair, this is not only a challenge for wind energy producers, as Elchin stressed, even for a diversified renewables company like Enel, which has a portfolio across solar, hydro, and wind, challenges like inflation and rising interest rates, higher labor costs, and supply chain headaches are making life a little difficult. And all of this news might be detracting from the idea of a booming renewable energy market, especially as we hear news about oil and gas companies looking to exploit new sources of fossil fuel and increasing anxiety about whether the world can ever meet a 1.5-degree Warming target. So for my last question, I asked Elchin how the current headwinds for renewable companies and those focusing on wind in particular might play out in the context of rising demand and increasing pressure to align with net zero ambitions.

Elchin Mammadov

Historically, Abner estimated the growth of renewables, and I'm optimistic. So I do think that the renewable growth is going to remain strong in the coming years and decade, and we're thinking in decades when it comes to energy transition. There might be some volatility. However, I do think that these issues will be ironed out. The cost of renewables have come down significantly over the past decade between 55 and 75% for wind and solar, and we do expect a further decline in cost over the coming decade. Yes, we've seen a temporary increase in this cost, but even with that increase, if we take offshore wind as an example, now the cost of offshore wind new capacity development is on par with coal.

So you might as well just build an offshore wind farm rather than new coal-fired power to avoid all this uncertainty over carbon prices and whatnot. So the technology improvements, economies of scale and eventual normalization of inflation and borrowing costs will help further drive the decline in the cost of renewables. We do see some experts questioning the 2030 targets for particular offshore wind capacity additions in the US and UK that might come true. But yeah, I'm an optimist, I do think that the marketplace will figure it out, and there would be an acceleration of deployments in the second part of this decade, so yeah.

Margarita Grabert

So, Elchin is an optimist by his own admission. Yes, there are certainly genuine difficulties in the intermediate term, but as he sees it, these are small variations that are buried in a bigger trend, one that spans decades where renewable deployment accelerates, a trend driven by a combination of rising demand for clean energy price parity with some fossil fuel sources, and more uncertainty about how and if carbon pricing will affect non-renewable generation. A lot has been achieved from the early nineties where one small wind farm could eke out five megawatts compared with the 12 to 14 megawatts that can now be generated by a single turbine. Ørsted's Hornsea One facility off the coast of Yorkshire in the North Sea is massive and successfully developing a second facility in the form of Hornsea Two, would essentially mean a combined capacity that would be enough to power more than 2.3 million homes. But for investors, the key phrase here is successfully developing because even with a decades-long trend that looks poised to be a boon to all renewable energy producers, downside risks haven't suddenly disappeared.

We talk about high inflation and rising interest rates and supply chain difficulties, but the truth of it is, building wind farms carries its own ESG-related challenges, including its impact on the environment and surrounding communities. And the question of what happens to these massive turbine blades that have exceeded their useful lifespan. Questions that we can maybe tackle in a future show. But as we have seen on this episode and many others before it, capitalizing on a specific environmentally related

opportunity like demand for renewable energy says nothing about how effectively a company is managing other environmental, social, and governance risks or indeed financial ones.

And that's it for this week. A massive thanks to Elchin for his take on the news with an ESG twist. I had a great time hosting my first show. The ESG Now team is growing quite happily, and one of the salty veterans will be back with you again next week. Hope that you enjoyed the content. Give us a like, or some stars, or even subscribe on your favorite podcast platform to make sure these episodes find you all by themselves. Thanks again and talk to you soon.

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