

ESG Now Podcast

“Utilities Lean into Adaptation Bonds”

Transcript, 8 December, 2023

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 am Margarita Grabert, and I'm back again as host for another episode. In case you missed my debut back in September, I am part of the MSCI team in the Frankfurt office. But like any good modern podcaster, I'm recording this in the comfort of my home, while Bentley and Mike take a well-deserved break, at least from podcasting. On today's episode, we are going to be getting into green bonds, specifically green bonds for financing climate adaptation projects.

And wherever in the world you're listening to this, you will have noticed the effects of our changing climate. From colder winters to sweltering summers and intensified monsoons, it's becoming increasingly difficult to dismiss these collective events as anomalies. And more discussion is now being focused on how we can adapt to these changes, which is what we're going to be looking at on today's episode, specifically how one industry, utilities, is planning its adaptation to a changing climate. And as we dive into the story, we'll look at why utilities are on the front lines of this adaptation shift, how they're tapping into green bonds to finance it, and what investors can take away from some early moves. So thanks for joining me today. Let's see where this story takes us.

So last week, my co-host, Mike Disabato, interviewed Oliver Marchand, our head of climate research, who is in the middle of the hustle and bustle of COP 28. And there's a lot to talk about when it comes to COP, but let's put most of it aside for now. The key point for us is that COP 28 is all about how we implement the Paris Climate Change Agreement and limit global temperature rise to 1.5 degrees. And there is a lot of debate as to whether it's already too late to hit this target, but wherever we, as a planet, end up, it seems that, even with tremendously successful mitigation efforts, we are in for more and more weather-related changes in the coming years. Research by some of my colleagues shows that, even if we manage to sneak in under a 1.5-degree target, 50% of companies in the MSCI ACWI Index will experience a moderate level of financial risk from physical climate impacts and nearly 20% will experience significant or severe financial risks, mainly due to coastal flooding, extreme heat, extreme cold, low river flow, and tropical cyclones.

Now, as these future changes in climate rollout, the resilience of companies to these changes is going to become a key piece of their competitive advantage. Yes, more frequent droughts will put pressure on companies that rely on water intensive manufacturing, but the companies that can manage this risk well, by introducing more water efficient technology, for example, could edge ahead of their competition in the long run. And the long run is what it is all about for utilities, a sector that has long lived assets and time horizons that extend across decades. So these companies are a natural starting point for adaptation planning, something that my colleague Meghna Mehta, out of our Mumbai office, has been keeping an eye on. Meghna is a green bond expert. And first, I asked her about a recent uptick in green bonds focused on adaptation, in a market that used to be all about mitigation.

Meghna Mehta

Sure. So we've been tracking, at MSCI, we've been tracking green bonds since about 2014. Interestingly, we've seen funding to climate adaptation only in about 2017, 2018. Prior to that, green bonds were primarily focusing on mitigation related activities, like, say, renewable energy, energy efficiency, green buildings. But in 2017, 2018, we saw some in recent funding to adaptation. And interestingly, we saw the first dedicated green bond to climate resilience. It was also called the climate resilience bond by the European Bank of Reconstruction and Development in 2019. And since then, funding to climate adaptation has increased every year. And, you know, the reasons for this, I suppose, are that one is there has been an increase in extreme weather events.

You know, as we can see every year, it gets hot and hotter, we see new heat waves in Europe, we see wildfires in California, we see increasing wildfires, say, in Australia. And consequently, with an increase in these severe weather events, sovereigns, agencies, some of the corporates also have taken notice of this and have to adapt their businesses or their countries to climate change. So I guess that really explains why there has been this increase in funding to adaptation. We do not see a lot of financial corporates funding adaptation, because adaptation isn't really a revenue generating activity. But we have seen sovereign bonds that fund adaptation. And in the recent five years about, we've also seen utilities in particular increase their green bond spend on climate adaptation.

Margarita Grabert

So as Meghna explained, we're starting to see the green bond market tentatively moving to include more climate adaptation. And as Meghna sees it, part of the shift is driven by the fact that there have been more extreme weather events, due to our changing climate. And increasingly, companies are starting to feel the impacts of this with each passing year. The CDP, a not-for-profit charity that runs a global disclosure system, put out a global supply chain report. And in this report, they found that companies are going to be facing up to \$120 billion in supply chain costs from environmental risks within the next few years.

And a large part of this rise in costs stems from physical impacts, things like floods, droughts, storms, and other extreme weather events. So it makes sense that companies are looking to get more on top of these risks. But for corporates, adaptation looks to be a lot more about managing risk, rather than maximizing profit, which might be why the takeoff for corporate green bonds targeting adaptation has been a bit slow. As Meghna told me, one sector where this takeoff has nudged ahead is in utilities. And as I asked her to explain why adaptation bonds have been more of a natural fit for utilities, it became clear that it has a lot to do with the size of the risk involved.

Meghna Mehta

Just to quote a small statistic, in 2018, only 5% of green bonds by utilities funded some sort of climate adaptation projects. But in 2023, we've seen over 25%, so about a five times increase in green bonds by utilities that fund climate adaptation or resilience projects. And I think this can be attributed to multiple reasons. Probably, the primary reason is that electric utilities, particularly that in the transmission and distribution sector, have a very high risk to extreme weather events over very large number of kilometers, sometimes thousands of kilometers. Whether it's to mitigate wildfire risk or whether it's to make the transmission lines more resilient to, say, torrential rain or floods or cyclones, these utilities need to adapt to climate change.

The second reason is that, for public safety, these transmission and distribution lines need to shut off in certain cases of extreme high weather, like, say, flooding, right? Hence, utilities now need to invest in

weather prediction models, automated shutoff systems, particularly for the distribution systems, in case of extreme weather. They're also funding projects, like moving their transmission lines from overhead to underground, which helps minimize wildfire risk. So these are typically the kind of projects that these utilities are investing in, via their climate adaptation funding, via green bonds.

Margarita Grabert

So as Meghna just told us, utilities have clearly grown their share of adaptation focused green bonds. And this makes sense. When we look at some of our data relating to physical climate risks that might be affecting companies in the MSCI ACWI IMI, we see that, in a 1.5 degree world, utilities is expected to be the sector most impacted by extreme weather events. On average, projections show that utility companies could face a loss of market value of around 7.5% through these physical climate risks. And some companies are already working to manage these risks, developing projects for climate proofing their business and trying to become more resilient to extreme weather that is to come. Terna, an Italian transmission operator, is looking to bury some of its transmission lines, using proceeds from a 2001 green bond. And San Diego Gas & Electric is looking at ways of reducing its risks from wildfires, including through the construction of microgrids.

But one company knows firsthand how devastating these climate impacts can be. Entergy, a New Orleans-based utility, lost 95 out of their 125 miles of transmission lines during Hurricane Katrina and has invested \$1 billion to improve the resilience of the substations and their transmission and distribution lines in those areas, to make sure they can withstand such storms in the future. The company has said that, over the last five years, they have invested, in total, around \$9.5 billion in their transmission and distribution assets to make sure they meet or exceed current resiliency standards. With this type of momentum starting to build and with utilities looking at green bond market as a way to fund their efforts to mitigate physical climate risk, I asked Meghna how investors might be thinking about this or how they might be assessing company efforts to tap into this type of capital.

Meghna Mehta

Sure. So I think investors need to know what the companies that they're investing in are doing to tackle these issues. Us seeing how utilities prepare for adaptation will actually help increase investor confidence in the company's near-term plan. In certain jurisdictions, like, say, California, which is extremely prone to wildfires, there are regulations that mandate utilities to plan for wildfires and invest in wildfire mitigation plans, wildfire mitigation technologies, and hence, they actually form part of the regulatory cost of the company. So even if they're not profitable, companies need to invest in this, from a regulatory perspective.

Margarita Grabert

For investors, efforts by companies and utilities especially to secure adaptation funding might be a clue to how well they're preparing for future climate risks. And it might also point to how well these companies could navigate future regulatory demands. In California, adaptation efforts aren't just a nice to have anymore, and other markets could go that way as well. And we're speaking largely about utilities, because that's where our green bond data is pointing. But Meghna is going to be keeping her eye on other sectors as well.

Meghna Mehta

So utilities, we do expect it to grow. But it's interesting, because we've also seen one or two bonds where they are now adapting road infrastructure for climate change. Looking to design roads and build roads are keeping in mind the extreme weather vulnerabilities of the region in which they're building it. For example, in Japan, you know Japan is prone to a lot of extreme weather events, and there was this Japanese green bond issuer that had issued a green bond, where majority proceeds were going to be used to build resilient roads and highways. And I suspect that, while this has started with utilities and, of course, with sovereign, I expect that it'll grow to other sectors as well. So maybe, sometime in two, three years down the line, we'll see, let's say, a manufacturing company saying that it is working to fund adaptation of its manufacturing sectors via green bonds.

Margarita Grabert

Right. So for the nascent world of adaptation bonds, it might be utilities today, but it could be the world tomorrow, at least metaphorically. Because the ongoing COP 28 in Dubai will be heavily focused on climate mitigation efforts, and rightly so, success there would mean a lighter lift when it comes to adaptation. But even in a very optimistic future scenario, extreme weather events aren't going anywhere anytime soon. And more and more, preparing for these risks feels less like a stretch target and more like the order of the day. And that's it for this week. A big thanks to Meghna for her take on the news with an ESG twist. I had a great time hosting again. Our little ESG Now team seems to be not so little anymore, so one of the other fantastic podcasters will be back again with you next week. I 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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