

HOW SOCIETE GENERALE APPROACHES ENERGY TRANSITION FINANCE OLIVIER MUSSET, GLOBAL HEAD OF ENERGY ESG INSIDER, A PODCAST FROM S&P GLOBAL

Corporates, investors, analysts, and academics gathered in Paris on May 10, 2023, for the S&P Global Sustainable1 Summit to discuss sustainability themes ranging from biodiversity to climate risk to net zero and the energy transition.

In this episode of the ESG Insider podcast, we sit down with conference speaker Olivier Musset, Global Head of Energy at the investment banking division of big French bank Societe Generale.

Lindsey Hall, Head of thought leadership at S&P Global Sustainable1: Welcome to ESG Insider, a podcast hosted by S&P Global, where we explore environmental, social and governance issues that are shaping investor activity and company strategy.

And at the conference, there was a big emphasis on biodiversity and the importance of taking nature into account when transitioning to a low-carbon economy. We also heard about making the transition as just and fair as possible. One thing discussed was adapting to a changing climate in a way that addresses the social implications for the whole population.

So, Jennifer, I'd love to hear what were your takeaways from the event?

Jennifer Laidlaw, senior writer on the Sustainable1 Thought Leadership team: I was really struck by the international nature of conversations, that sustainability is really something that's global. We heard from Su Lloyd, who is Vice Chair of the International Sustainability Standards Board. The Board soon to be released climate disclosure status will have a global reach. She also brought home the idea that we can't approach sustainability in silos and that sustainability goals need to be integrated.

One topic I found particularly interesting with the panel on the challenges of the energy transition. And I wanted to dig a little deeper into some of the topics that were discussed. So afterwards, I spoke to one of the participants, Olivier Musset, who is Global Head of Energy at the investment banking division of large French bank Société Générale. Here's our conversation.

Well, thank you very much for agreeing to take part in the ESG insider podcast. I just want to get some idea from you in the beginning what Société Générale is doing in terms of the energy transition.

Olivier Musset: Yes. Thank you. It's a very large question because we do a lot and I'm a strong believer when it comes to the energy transition, it comes to the real economy. And the role of the bank is really to finance the economy. That's the reason why I really do believe that we have a role to play. And even more so because we have always been very strong in Energy Finance.

And one of the big items for the transition is to convert our energy mix. My background is as a project financier. And there is a lot to be done because what we see is a need for immense amount of CapEx, capital expenditure to ensure that we convert heavy industry to low carbon solutions. Just to remember everybody about this amount of CapEx needed by 2030 according to IEA, which is USD 4 trillion to achieve net-zero ambition by 2050. It's a lot of investment, 4 times more than what we do today. Everybody will have to be committed to deliver

more. At Société Générale, we had committed to deploy and to contribute USD 120 billion from 2019 to 2022, and we have now resized this commitment up to USD 300 billion from 2022 to 2025. It's just to show that there is an acceleration, and what we want is really to be part of this acceleration, to deliver more, because we need more if we want to meet the target of net zero by 2050.

Jennifer Laidlaw: That's a lot of money, billions.... What exactly, do you do with this money, what projects are you investing in?

Olivier Musset: The backbone of the transition so far has been renewables. A lot of investments have been directed to renewables, which is now a more and more mature industry. And we see more and more investment needed to build and commission more renewable projects. That's really the bulk.

Then we talk about a lot of diversifications to provide low carbon solutions. And there are many technologies which are in implementation, but not yet at scale. And here, I can mention green hydrogen or blue hydrogen, carbon capture sequestration, biogas, battery storage as well. So, you have a variety of technologies, which are there, which are not yet industrially tested at scale. And what we do for those technologies is really to advise developers to understand what the conditions for them will be to raise project finance money to build large-scale facilities. But we have not yet seen that many FIDs when it comes to this top-notch scale which will be required to deliver economy of scale.

Jennifer Laidlaw: When you talk about scaling up, that's a huge question that we hear a lot about. And the importance of public-private partnerships. How much impairment when you're scaling up, when you're making these investments, how much of it is partnerships with the public sector?

Olivier Musset: I think it's really a key. When you look at what has been done so far to support the energy transition -- the underlying cash flow for 99% of the total is fully contracted cash flows. And I mean by that, that the projects or the companies are not exposed to a merchant price. They have a fixed price, or they are the mechanism by which they will not be exposed to change in pricing. And this is where you have a lot of support provided by governments, by regulators, to ensure that you provide stability over the long term for cash flow to be used to repay the debt. And this is in that sense that I see really this partnership. The government, the regulators have absolutely to provide stability in the regulatory regimes to provide developers with all comfort that they can deploy capital over a long period of time and get their money back.

Jennifer Laidlaw: What kind of financial products are in development to get to those billions and billions of dollars of investment that you want to make?

Olivier Musset: I will say on that front and back to my point about the real economy, I think for the bulk of what we do, there is no innovation in financial products. The innovation has been more on sustainability-linked loans, green and sustainable bonds, which are now available for companies to direct their investment toward greener investment. And that's fine and is getting to a size which is very visible. If you think about green bonds, there were more than USD 1 trillion of green bonds last year, which is more than 10% of the total capital markets. So, it's quite huge over a relatively sharp period.

When it comes to renewables, this new technology, clearly, we are back to the traditional world. We are talking about letters of credit, project financing. That's really the world of yesterday, but it still applies because what we need is to finance Capex, and this has proved to be the best way to do that.

Jennifer Laidlaw: You mentioned innovation, that's a very important thing. What kind of position are new technologies playing in the investments that you make?

Olivier Musset: Innovation is crucial. Now when I look at innovation, I think we need also to define what we mean because sometimes we refer to innovation where I see scale up -- and I think it's what we have seen, if I take the example of renewables, we have seen a fantastic scale up.

We had a turbine of, let's say, 1 to 2 megawatts (MW) 20 years ago. And now we are talking about 15MW at some point in time, maybe 20MW turbine for offshore wind. So, we can see that it's multiplied by almost 20, over a relatively short period of time. So, innovation, clearly, plays a role. But what I see is really the effect of the scale-up. So, we go step by step.

Banks are not going to change their credit appetite for something which is not fully tested. It would be a recipe for disaster, this is not sustainable. So, we have to apply our common due diligence and get certain that these type of projects are going to be commissioned.

When it comes to new technologies, if I take hydrogen or carbon capture, nobody can tell that they are new technologies. They have been used at many places, and they have proved to be highly reliable. The key item is that we need to scale up them. They are too small. 10 MW, 100 MW green hydrogen projects are not enough when you see the total production, which must be achieved over 10, 20 years, it doesn't work. We must move to the gigawatt scale. And this is where we need a lot of progress step by step, innovation, for sure, and efficiency gain to reach that 1 GW score. And for carbon capture, it's the same.

So, it's a combination of all these small innovations, which might get us to deliver the net-zero. There are still areas where we are yet to see development. And I'd like to flag, for example, solid oxide for electrolyzer. There is also direct air capture, where we can see also great development sooner or later. You also have chemistry of carbon dioxide so-called "green fuel", which is a fantastic area of innovations.

If we can combine carbon dioxide with green hydrogen -- this is a fantastic goal. We capture CO₂ and we use it to produce fuel, green fuel. So, I think there are still areas which are already a game changer and might give us the ability to deliver the net-zero. Let's be honest, there is a slow start. We are not on the trajectory. And by 2030, we are unlikely to get there. But with this type of innovation, which are crucial, we might catch up and even take over to recoup the excess we produce before 2030.

Jennifer Laidlaw: You were talking about risks. Banks are not going to take risks on things that they don't know about. You are willing to take risk to invest in this kind of innovative products or projects that maybe you're not sure exactly if they're going to be successful or not.

Olivier Musset: What we are doing is a lot of due diligence. One example: we financed and advised the first ever floating offshore wind project, in the south of France. So, we acted as advisers and lenders to this project. It's not easy to tell your credit committee: "Guys, we are going to finance something which is 100 meter high and floating with the forces of the wind or the rotation of the blades with the waves of the sea. You could say, guys, I know it's a bit crazy. -- we are not going to do that. I think through a lot of studies, a lot of due diligence, you get to a point that you can get comfortable that this is ready to work.

First, they are very often prototypes, smaller-scale prototypes, proving the technology. And then you are back to the scale-up discussion. Are we right in our scale-up design, and we manage on this specific one to get comfortable. And as there are now plenty of projects over the globe for other floating projects, I am pretty sure that banks are going to get comfortable because developers are themselves comfortable as they are going to invest their equities, their time and work. And I do believe that at the end of the day, we should deliver a new segment in the renewable industry, which is the floating offshore.

Jennifer Laidlaw: What other projects are you may be working on in different regions right in the world?

Olivier Musset: The one we are currently advising is a developer of green fuel in the U.S. Their goal is to capture CO2 to produce renewable and launch a processing of carbon dioxide and hydrogen to produce a variety of hydrocarbon.

And so, this type of thing is in preparation. We have also a couple of advisory mandates in carbon capture. We have a couple of them in the U.K. We have green hydrogen project also being advised by us in Australia, in the U.S. or in Europe. So, across the board, we are at the stage of advisory. So, a lot of studies, a lot of discussions, a lot of assessments to ensure that when we propose this type of opportunity to banks, banks are going to be able to approve these various technologies and projects. But when I look at them, we see that we really are already at the start. We are already at the start of a big wave of investment, but which will probably be coming later, by 2028 or 2030.

Jennifer Laidlaw: Obviously, with the economic situation now, we have rising inflation, a very difficult economy. What impact do you think, that is going to have on transition finance on the current financing that you're doing?

Olivier Musset: Inflation is a big issue, for all stakeholders. Put yourself into the place of a developer: you want to develop something and then suddenly, when you wake up, your estimate is now a plus 20% compared to what you had in the past. It no longer works. It means that you have no longer projects. It means that you have to come back to your contractor to renegotiate maybe some savings. You have to talk to your off taker because you want to have a higher price for the product you produce. Your financier, your bank is going to ask you for a higher interest rate because of the underlying index having raised.

So, a lot of features, which mean delays. And, to me, the point of convergence for all this negotiation is time. You need time, so you need to rework on many aspects of your project, and we are facing delays.

We have not seen really a default because most of the time, the projects we finance have already locked lump-sum prices. And so, they had the financing plans meeting their outstanding needs. But for new projects, clearly, what I see is unfortunately delays. Three years ago, nobody was thinking of an inflation higher than 2%. Now this time has gone. And clearly, we want to see sensibilities analysis, showing that whatever the project is going to be resilient through a high inflation scenario.

Jennifer Laidlaw: And in terms of delays, does that change in any way your own plans? You were talking at the beginning about the billions you want to invest by 2025. Is that going to impact your investment plans or not?

Olivier Musset: It's not going to help. But I think that we are so committed to deliver these various targets that we continue to feel extremely confident. There is also a couple of good news: I'm referring to, for example, the Inflation Reduction Act. This was a game changer at the time of the inflation. And if you think about the name Inflation Reduction Act, it means that these projects were no longer feasible in the U.S. and that by the effect of this change of fiscal regime, they are back in the row and they can come to raise finance in a sustainable way.

Jennifer Laidlaw: You mentioned the Inflation Reduction Act. You talked about project that you have in the U.S. What kind of impact is the Inflation Reduction Act having on your financing activities in the U.S.?

Olivier Musset: I would say what we see clearly is a wave of prospect. The activity is really booming in many directions. As of today, the IRA is not yet implemented. There is still a need for a series of decrees to make it applicable. And there are still a lot of questions about the tax credit and the way it's going to work. It's still in the making, but we are getting there.

But what I see is that in preparation of the implementation of the IRA, there is a strong willingness to direct investments towards the U.S. because this is where you can get the higher return on projects by far. You have lands available, low sources of energies, low price of energies, manpower, ai a whole ecosystem which is highly favorable to launch this type of investment. So clearly, we see our American platform as being a growing platform.

Jennifer Laidlaw: In terms of the EU with its own Net-Zero Industrial Act, is that going to boost the amount of financing that you're doing in the EU in as well on renewables, on clean tech and on other sectors?

Olivier Musset: We might see more investment, but I would not expect it to be in the same order of magnitude compared to what we see in the U.S.

First, each time there is a new directive at the EU level, it has to be implemented locally in each European countries in compliance with the directive. So, we will see how it is implemented and it will take time.

Again, we are talking about something, which is not yet known as a matter of fact, whereas in the U.S., as of today, we see exactly the shape it's going to take. So, therefore, as an investor, time is money. You want to go quick because you want to be a first comer in many of these sectors. So, where you go, you go where you can get the best immediate return, which is clearly in the U.S.

Jennifer Laidlaw: Anything else, maybe we haven't touched upon that you think is important or you would like to add?

Olivier Musset: I would say the one thing that we have not touched upon is the fact that we invest a lot of time to train our people, so it's a change of mindset. What you want is for people to be fully embarked into the journey because we have a commitment to be net-zero by 2050. So, it's quite important to embark all your staff, for them to really understand that it's a common goal and that we are pretty committed to go in that direction.

We have set a couple of targets for 2025 for 2030 in terms of reduction of our upstream portfolio by 25, also our Scope 3 exposure to upstream by 2030, minus 30%. So, there is a lot of short-term commitment demonstrating that we mean what we say with short-term target.

Jennifer Laidlaw: Okay, fantastic. Well, thank you very much for joining us, I do appreciate it. And I hope you enjoy the rest of the conference.

Olivier Musset: Thank you very much.