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gigantic volumes that can be invested, but at the same time a very challenging environment," says Elise Vaudour, head of wealth for Green Investments at MAM

Vaudour mentions Macquarie's advantages of having industrial know-how, relationships and networks, as well as being an early mover, adding that "this team has the expertise to deliver value across the board... based on the investors' appetite for risk, risk-adjusted returns and investment horizon".

"You have that... geographical diversification, but you also have technology or revenue model diversification. And I do think that in this new environment we are in, with increased complexity, that is what's going to pay off," she adds.

### True green practitioners

The Green Investments team sees few competitors with comparable levels of scope, skill and ambition for energy transition investing. "In terms of being proper practitioners of the transition rather than people who just invest in it... there aren't very many. There's only one that I would say is built of practitioners like we are. And I'm not going to say who they are," says Mark Dooley, global head of Green Investments. Any reader now mentally drawing up a shortlist of candidates is not the first to do so.

As the complexity of investing in the energy transition only grows, GPs must step up their game, too, to provide dispatchable renewable power 24/7. Macquarie Group, a commodities powerhouse, is now banking heavily on the weather and the ability to structure PPAs that can account for it.

"Once upon a time, if you could find a field that had some good irradiation, then you thought, 'This is pretty good. We'll talk to the farmer, put some solar there and we'll work out how to connect it to the grid'," Dooley reminisces. Now, he says, the conversation begins

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### Elise Vaudour

with a very sophisticated insight into what the grid needs and what the market dynamics associated with the grid in a particular location are.

But this is no complaint. Across the world, large corporates present as consistent drivers of the PPA market, and the demand for green power is, says Dooley, "an amazing bellwether as to how the business world feels about the imperative of moving to net zero. And that bellwether is behaving in a very resilient, resolute way".

### Valuations woes

The growing demand for green power has sheltered investments in the energy transition somewhat from the downturn in real asset valuations. Still, Macquarie saw net profit contribution for FY24 YTD, reported in February, being substantially down on FY23 YTD, primarily due to lower asset realisations in green investments.

Adding to the less than rosy picture is the fact that PPA prices in Europe are under pressure from a glut of natural gas coinciding with a demand for power that has yet to recover from the double whammy of covid-related closures and the ongoing conflict with Russia. In the US and in APAC, however, there is a more direct relationship between the strong demand for green power and the price green PPAs can command. Even so, valuations in the green power generation sector have been under macroeconomic pressure in the US as well.

"By no means do we take the last 12 months as an indication of the validity of the sector," says William Demas, head of Americas for Macquarie Green Investments. "We believe that this is a multiple-decade opportunity. Of course, with a long runway like that, you will run into times where things aren't as rosy as they were the year before. We certainly acknowledge that we're facing some challenges right now.

"I think from a valuation standpoint, what we've seen is that investors are adjusting their discount rates and target IRRs to reflect the increased interest rate environment. That is now slowly feeding into the transactions that are being executed."

### Offshore on the offence

One subsector where the changing economic environment has been particularly noticeable is offshore wind where Macquarie is invested both in commissioned power plants in the UK and Taiwan, and in a sizeable pipeline of global projects through the Corio Generation platform.

A transitioning US assumes the deployment of meaningful amounts of offshore wind generation, according to Demas. "Do I believe ultimately that there will be a significant industry around offshore wind here in the US? The answer is yes."

Dooley concurs. "We've seen in New York a period of dislocation and a bit of pain for some players last year. But the powerful message to come out of it is that the public sector tender authorities have re-tendered the same projects at price levels that now make them viable." Presumably, a new lease of life will be provided, too, for the three recently cancelled New York projects, one of which involves Corio.

And sceptics should bear in mind that there may be little alternative. "Offshore wind... is not the cheapest of the renewable technologies," Dooley adds. "So generally, where a region is deep into executing or exploring it, it's because they've explored the alternatives and offshore wind turns out to be, whilst a little bit more expensive than solar or onshore wind, perhaps the best solution to the riddle that they have to

#### Overblown threats

Spurred on by strong public support, both in terms of subsidies and sentiment, the energy transition has gained sufficient traction to survive both the onslaught of soaring power prices in the first years of this decade as well as the current inflationary high-interest rate

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environment. That both China and India are committed to green investments shows that the transition has global legs and finds favour even in the most hardened of coal-based economies.

A change of government in the US, however, is a potential stumbling block as this could impact on the energy transition-boosting Inflation Reduction Act. But this threat is overblown, according to Demas: "Macquarie has been investing in this opportunity set, this thematic for two decades. And we believe we have produced strong results investing in the sector through multiple different administrations.

"Fundamentally, we don't believe that the IRA will be unwound or repealed." This, Demas argues, is because no one party is likely to be in complete control, and also a lot of the jobs and investment brought about by the IRA are in Republican-led states.

This doesn't mean that there would be no impact, though. "There are obvious implications of a president or an administration that either superficially or otherwise does not support clean energy or the energy trend. It would certainly lead to some throttling of the growth of opportunity during those years. It would lead to some unclarity," Demas says.

As for the ongoing debate on the legitimacy of investments with a strong environmental and social governance focus, there's no pretending that this has not left a mark.

"Has a recent backlash at ESG affected how we invest? No, because we don't necessarily invest strictly on ESG metrics. Has it impacted fundraising or this overall market? I think the answer, to be completely honest, is yes. People are more tepid. People are more standing on the sidelines to see what happens and what emerges from this current discussion. I would say, though, that the last few months, it seems that investors are very happy to support our platform in terms of supporting our investments, without having any negative ramifications around the ESG," Demas says.

Dooley is also upbeat about the continued support for the sector: "The truth is we also get a surge of curiosity and openness to our offering from investors around the world who are aligned with the energy transition and, where it is the case, it reflects the expectations of their stakeholders that they will conduct themselves in a way that is promoting the energy transition. We see that a lot."

#### A maturing market

In a high interest rate environment, wringing returns from the vanilla market of solar and wind generation, which is bordering saturation in some places with regards to what can be profitably deployed, will demand more from managers.

Dooley is well aware of this. "The early years of this new market are behind us, so what do we want to do in the maturing market? Operational excellence. We have to have that in every

business that we invest in, and we have to proactively curate for that. And, to a large extent, that's doing the simple things really well and reliably.

"And then the second thing is, even when markets look as though they're mature, actually, that's not right. There are decades to go before we understand everything about how a renewable energy-based power market works."

This is a widely shared sentiment. Few conference panels end without some mention of the ever-growing complexity in the sector. And good luck trying to understand the business plan for colocated solar generation and battery storage on your lunch break.

"We're moving to a future where these technologies... pretty much have got to do it all. This requires new levels of sophistication and, on top of that, of operational excellence. We want to be leaders in how to join together these technologies so they can respond to the rightful expectations of a community

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that wants the light to go on when they flip the switch," says Dooley.

Other than considering the actual delivery of power, the regulatory environment is changing. How an asset disposes of waste – be it heat, water, emissions or other pollution – is a chapter aside, as is the question of how well the business plan accommodates the changing climate or likely new taxes. Dooley sees the scrutiny as a force for good.

"We're just at the beginning of an amazing thing, which is that good old accounting and reporting are going to be these massive engines of transformation, because good accounting for risk is going to expect companies to report on all the planning they've done to enhance their own resilience. And their resilience is not just to the impacts of climate change, but... to the impact of another imperative: the regulatory expectation. Are you resilient to the possibility that carbon pricing will come in? So, accounting is going to end up being an engine of transformation? It's already started."

### Value creation

Projects in the energy transition space are notorious for taking a long time to bring to FID, and back when the Green Investments' portfolio companies were all on the Macquarie Group balance sheet, as was the case until April 2022, this was an internal issue. Now that the company takes a fund approach to green investments, the value creation is perhaps a little less straightforward.

"We want to be – on behalf of LPs – an owner and curator of a portfolio of companies that are in the business of developing, owning, operating and, over time, harvesting portfolios of really good assets," says Dooley.

"Asset trading can happen underneath those portfolio companies," he adds, specifying that such sales would be opportunistic and to the market.

One of the more recently established fund-owned platforms is battery

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storage developer Eku Energy, which is jointly owned by the Macquarie Green Investments Group Energy Transition Solutions fund and BCI.

The process of offloading the balance sheet of legacy green investments is ongoing. A few weeks ago, six portfolio companies and/or assets with more than 17GW of green energy capacity in development, construction and operations were sold on from the Macquarie balance sheet to the open-ended Macquarie GIG Green Energy Climate Opportunities Fund launched in 2023 and focused on established technologies.

And some businesses remain on the Macquarie Group balance sheet, two of which are sizeable: the global offshore wind specialist Corio Generation and Europe-focused PV developer Cero. Admittedly, either company would be hard to swallow for the green investments-focused funds available to the team at the moment. Cero has a solar and storage portfolio of no less than 25GW and Corio, launched only the month before Green Investments moved to MAM from Macquarie Capital, has over 30GW of projects in the

pipeline including both floating and fixed offshore wind farms.

"The projects that Corio develops are huge and it does create opportunity for our LPs, and we will systematically be giving our LPs the opportunity to be part of that development journey," says Dooley.

Macquarie declined to comment on funds and fundraising.

#### Going non-core green

The ever-larger offshore wind farms will likely – to some degree – facilitate green hydrogen production and derivatives thereof, such as e-methanol and e-ammonia. Macquarie is invested in green fertiliser production through the newly bought Atlas Agro business but has bowed out of the hugely ambitious Australian Renewable Energy Hub, a 26GW mega-project estaimated to cost A\$55 billion (\$35.8 billion; €33.5 billion)

Focus is on the US and on the industrial end-products of green hydrogen rather than the actual hydrogen. "Prior to the IRA, green hydrogen was an interesting academic exercise for us to think through, and post-IRA, it became a very investable exercise for us, given the support that the IRA gave to that particular technology. It effectively overnight made the US the most attractive investment region for green hydrogen," says Demas.

"I'd say in the next four or five years, we'll begin to see a real take-up of green hydrogen projects in the US, whether it's producing just green hydrogen or producing byproducts such as fertiliser, or methanol, or ammonia."

Macquarie won't take risks on technologies but looks for "technologies that are well understood, reliable in their operation, but not yet as deployed as we know they're going to become in the next couple of decades", says Dooley. Hydrogen could well fit that bill

For investing in such non-core assets, the company sails closer to standard private equity practices than is usual for infrastructure investments. But the resulting returns are not the only thing motivating investors in these assets; there is also a desire to get involved in the next phase of the energy transition, as Dooley explains: "The right approach to maximise outcomes for LPs involves some profit taking and exiting in a typical private equity way and, so far, this strategy has been favourably received.

"I think that's because it's got the private equity financial characteristics, but it's also because investors feel that while it's great to get behind wind and solar, maybe their constituents feel that they need to be shining the searchlight on what comes next as well," he adds.

Wherever 'green' goes next, it seems likely that MAM's Green Investments team will be there, both as practitioners and as part of the thought leadership that will see the transition through the rest of this decade and into the next ones.

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**William Demas** 

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