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FOR THE WORLD'S INFRASTRUCTURE MARKETS

INFRASTRUCTURE INVESTOR

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THE ENERGY COMPANIES OF THE FUTURE

THE WORLD'S BIGGEST CAPITAL RAISERS
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KEYNOTE

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Roundtable

Renewable Energy

SUPPORTED BY
- AQUILA CAPITAL
- RESONANCE ASSET MANAGEMENT

PHOTOGRAPHY BY JAMES CLARKE

Back on centre stage

In the wake of the Crisis that began in 2008, the priority was to save the global economy. Now, saving the planet is front of mind once more – and that means a fresh focus on renewable energy investment. Andy Thomson sought views on current and possible future trends

Four leading renewable energy investment professionals – three representing the equity side of the financing equation, and one debt – are gathered at offices in London belonging to Deutsche Bank. On the surrounding walls are works of art by Frank Auerbach, who left his Berlin home for England aged eight and never saw his parents again. This experience of loss is expressed in his paintings which – according to the description underneath one of the artworks – seek to "pin down something before it disappears".

This sense of impending loss is the motivation for those who seek to halt, or at least slow down or mitigate, the effects of climate change on the planet. In the wake of the Global Financial Crisis (GFC), the prospect of economic rather than environmental meltdown was the prime concern and climate change responses were somewhat deprioritised. But those around the table believe, as GFC-related shockwaves begin to subside, that the tide is turning once again.

"The Rockefeller Foundation has said it is withdrawing from investments in fossil fuel industries, and climate change has moved back into the focus of public debate," says Dominik Thumfart, a managing director and head of infrastructure & energy in the capital markets and treasury solutions division at Deutsche Bank.

"AP4 [the Swedish pension fund] says it wants to completely decarbonise its portfolio and that's a massive fund," adds Nick Wood, founder and chief executive of real asset investment firm Resonance

Asset Management. "There's a real sense that we're back on track in tackling climate change issues."

BIG PICTURE

This is big picture stuff but it's significant because, as large investors increasingly move away from fossil fuel exposure, an enormous amount of capital is likely to head the way of renewable energy investors instead. Even without this fresh capital influx, the renewable energy investment scene is already highly competitive as investors search for yield (which renewable energy is able to provide) and seek refuge from low fixed-income returns.

Indeed, Oldrik Verloop, co-head of renewable infrastructure at Hamburg-based alternative asset investment firm Aquila Capital, cites competition for assets as one of the major risk factors in the market today. "There is a risk of overpaying and of the market overheating," he cautions.

This helps to explain why each of those around the table is keen to highlight distinctive aspects of their own organisations' approach. For Aquila Capital, which has already built solar and wind portfolios, this means looking at hydropower opportunities. In July this year, the firm formed a partnership with Dutch pension fund manager APG Asset Management to invest up to €500 million in European hydropower infrastructure.

Verloop says hydropower is a "diversifier" for Aquila's institutional clients, and adds that "the technology [associated with it] has been around for a hundred years and it offers stable cash flows". Luis Quiroga, a member of the renewable energy team at fund manager HgCapital who has responsibility for investment strategy, describes hydropower as a "rare pearl".

VOLATILITY

Verloop acknowledges that the volatility associated with hydropower differs from one project to another – and that this means investors should diversify within the sector both by geographical location (so a wet season in one location compensates for a dry one in another) and also by type of project (for example, those with significant energy storage capacity versus 'run-of-the-river').

"We have both run-of-the-river and storage projects and we're highly diversified," points out Quiroga with reference to HgCapital. "The year-on-year volatility is higher than solar but the trade-off is that it's very established technology and you can accurately forecast precipitation levels in the long term. Plus, the resource risk is far less than you have with wind."

Wood says he believes hydropower fits the definition of "core infrastructure" along with areas such as onshore wind and ground-mounted solar given its low risk and established technology – thus making it a valid recipient of capital for

Around the table

Luis Quiroga, HgCapital

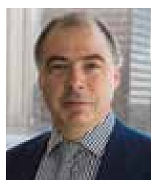
A director of renewable energy at HgCapital, whose second fund is the largest dedicated renewable energy fund in Europe at €550 million. It is now around 60 percent invested. Quiroga is responsible for investment strategy which unlike normal origination involves taking a long-term view of opportunities. He is also responsible for HgCapital's Spanish investments and in that capacity he has been leading the firm's engagement with Spain's retroactive regulatory changes affecting renewable energy investments.

Dominik Thumfart, Deutsche Bank

A managing director, Thumfart heads infrastructure & energy and spearheads origination of financing and risk management opportunities on the bank's capital markets and treasury solutions platform. He believes renewable energy is looking "a bit commoditised" in the smaller deal space which means Deutsche Bank focuses more on larger, more complex bank deals and capital markets financings covering both senior and subordinated debt.

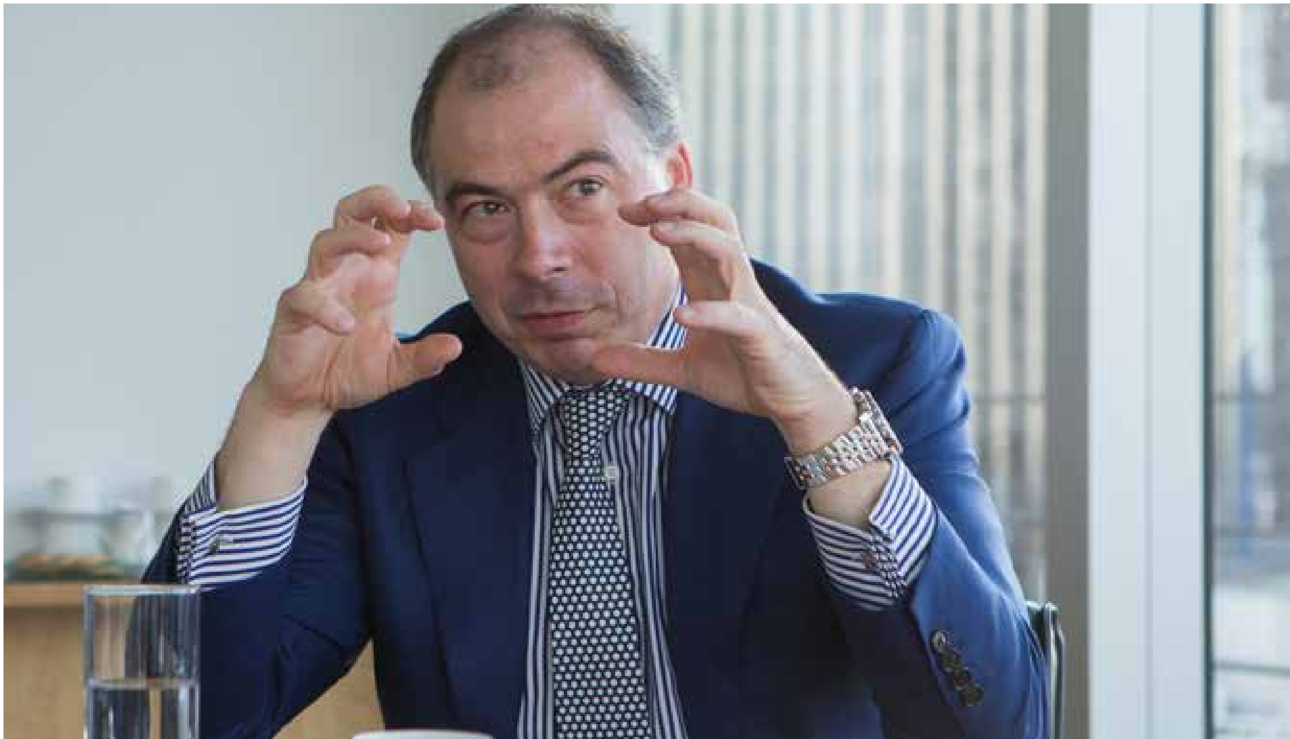
Oldrik Verloop, Aquila Capital

He is part of the hydropower team at Aquila Capital, which has around €8 billion under management in alternative assets. The firm has an increasing focus on renewable energy as well as farmland and real estate. Aquila's hydropower focus is on Scandinavia and Turkey, while it is also one of the top three investors in the solar photovoltaic sector in Germany and France.



Nick Wood, Resonance Asset Management

Founded alternative assets firm Resonance in 2011, having previously overseen asset management businesses at Man Investments. Resonance has a £100 million (€128 million; $161 million) fund aiming to consolidate the UK wind farm sector, which is now around 75 percent invested. Going forward, the firm is looking at energy, water and waste opportunities within a real assets context.



"AP4 [the Swedish pension fund] says it wants to completely decarbonise its portfolio and that's a massive fund" **Wood**

the large numbers of investors seeking core infrastructure opportunities today.

Verloop agrees with this assessment and makes the point that in a country like Canada, with a long tradition of hydropower investment, there would be an automatic assumption that it is core infrastructure. In Europe, however, hydropower investment has been on a smaller scale and hence is not so well recognised.

For Deutsche Bank, the surge of interest in renewable energy has led to consideration of where it can best add value as an organisation and a focus on large and complex deals rather than the "plain vanilla" part of the market. Thumfart talks of the bank's longstanding involvement in construction debt financing and says that, "once assets are built they are essentially de-risked and ideally you can get them to investment grade (or close thereto) and a refinancing. At that point, the assets are really infrastructure assets and you can bring in new investors on both the equity and debt side".

'RISK TRANSFORMER'

Thumfart describes Deutsche Bank as a "facilitator" and "risk transformer" in today's market. "We underwrite debt but we may not hold it for the long term as we're not necessarily the cheapest source," he says. "Developers need to understand that. Some still say 'I need 20-year finance now', but long-term bank finance is disappearing due to the regulatory environment. What is happening is a growing differentiation between construction risks taken by banks and long-term operations risk taken by non-bank lenders."

Talk of the regulatory environment brings the discussion around to the vital issue of risk in renewable energy investing, including a reflection on the shocks to the system that have been delivered by regulators such as the notorious retroactive cuts to feed-in tariffs by the Spanish government.

Thumfart says one of the most significant side effects of what happened most starkly in Spain – though other markets

have also suffered less hyped regulatory shocks – has been on credit risk assessment. "With wind and solar what's changed is the way credit risk departments look at credit risk in relation to regulatory regimes," he says. "There is close scrutiny of how much of the economics come from the physical resource and how much from the subsidy; and also what is the legal basis of the subsidy."

GENEROUS SUBSIDIES

Germany is another country where generous subsidies for solar have caused controversy, leading to subsequent cuts. "Germany is only subsidising solar plants of less than 10 megawatts now," says Verloop. "For large solar plants, it's based on market price and it needs to make sense economically from day one."

Wood acknowledges the regulatory risks but also believes investors need to be pragmatic. "There is always the prospect of regulatory shock as you are investing over such a long period," he points out. "In the UK there is uncertainty over the Contracts For Difference (CFD) regime, which looks like it will involve reverse auctions based on lowest-priced bids and which will disincentivise the smaller developers which don't have the balance sheet strength."

Regulatory risk is not the only kind of risk occupying the minds of renewable energy investors. Another one is 'balancing risk', which is the risk of the costs from the energy output not precisely matching demand. Quiroga feels it is not well recognised. "Most vendor financial models ignore or misprice it. It takes a specialised technical adviser to analyse it and even then it can be difficult to forecast," he notes.

Other risks are arguably of a more prosaic variety but no less important – including the challenge of finding the right deal partners. "Pre-investment you look at the matrix of regulatory, economic and market risks," says Verloop. "But from a deal perspective, I look at who are my consortium partners. I'm putting time and effort into the deal and I don't want to lose it."

"We underwrite debt but we may not hold it for the long term as we're not necessarily the cheapest source. Developers need to understand that"

Thumfart

Wood says there are also competitive risks to consider. "We ask questions such as whether the deal fits our strategy and are we the best buyer? Infrastructure assets are distinctive in the sense that it's difficult to get a big upside but it's easy to get a big downside. So you need to find investment areas where there's not a flood of capital and you end up overpaying."

'HISTORY OF UNDER-PERFORMING WIND'

Quiroga, meanwhile, expresses the view that some of the risks associated with certain types of renewable energy can

be overestimated, such as construction or resource (wind) risk. "It depends on your ability to manage risk and some managers are better able to do it than others. For instance there is a history of under-performing wind assets so some people discount resource estimates. This is a simplistic approach, instead investors should seek to understand those risks and develop capabilities to manage them. For instance we have developed proprietary wind assessment methodology that has delivered performance according to plan since 2008."

The discussion moves on from risk to opportunity, and a discussion centres around the likelihood of consolidation plays within renewable energy. Wood believes that, in time, new kinds of energy companies will be created once renewable energy's place in the energy mainstream has been accepted.

"The opportunity is to see renewable energy as part of the system and not as some kind of 'internal insurgent'," he says. "You'll see a new form of energy company which utilises fossil fuel for the time being but also renewable energy. It's about moving beyond that concept of the internal insurgent to consolidating the industry and building the energy companies of tomorrow."

"When procuring a large order of equipment, you can even get suppliers to reorganise their production for you and you can get a customised product at a very low cost"
Quiroga

Thumfart is not sure that consolidation will be a widespread phenomenon. "There might be consolidation of small, entrepreneurial entities among developers and operators of renewable energy facilities but at the national, regional or global level? You would have to make sense of the synergies. Would there be a global solar play, for example? Probably not. Energy markets are local, or at best regional, in nature due to regulation."

Regardless of the likelihood of consolidation, Quiroga sees a huge potential benefit associated with it. "It gives you enormous buying power," he points out. "For instance when procuring a large order of equipment, you can even get suppliers to reorganise their production for you and you can get a customised product at a very low cost."

EMERGING MARKETS

Asked to provide their views on prospects in emerging markets, there is a mixed response from those around the table. "Emerging markets are very electricity-hungry and there are a lot of greenfield projects that can and will happen," says Verloop. "There are small green shoots. As investors get more comfortable with the risks of renewable energy, there will be a lot of opportunity in emerging markets for solar, wind and hydro."

"Emerging markets typically have fantastic resources but weak political and regulatory frameworks," cautions Wood. "Those that can improve their frameworks have great prospects and demand is growing."

Quiroga picks up on the reference to demand for infrastructure and asserts that "from an investors' perspective it is not necessarily an indication of good returns". He adds: "Research suggests that there is no clear correlation between GDP growth and infrastructure investor returns. In Europe we don't need a lot of infrastructure relative to emerging markets, but it can still be a good investment."

A massive growth in financing options for European renewable energy infrastructure is testament to that recognition of the attractiveness of Europe. Thumfart says the Deutsche Bank team is busier than ever on a broad variety of renewables situations with many product solutions going beyond traditional project financing.

TAKEAWAYS

Thumfart has a couple of other key takeaways: one, that in view of the geopolitical situation, "indigenous" power generation will remain an important priority for governments within the European Union and other countries: security of supply considerations will foster demand for renewables.

Also, cost degression of all technologies will remain a key priority in view of stagnant economies in developed countries. European industry needs to make sure it remains competitive against the US in view of significant differences in the cost of energy.

With the clock ticking, Verloop declares himself "very optimistic" about the future. "For greenfield or operational investors, there is good availability of assets and lessons have been learned from the point of view of grid connectivity and regulation. Plus, the technology has taken leaps forward. As renewable energy financiers, we can expand greatly on what we have achieved so far."

It seems as good a note as any on which to wrap up proceedings. ■

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Verloop

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