KEYNOTE INTERVIEW

Europe's energy transition enters a new phase

The energy transition story is picking up pace, driven by both the decarbonisation agenda and the need to secure energy independence and growth in demand, says NTR's Rosheen McGuckian

The need to decarbonise the economy is no longer the primary motivating force behind Europe's energy transition. Russia's invasion of Ukraine has been compounded by President Donald Trump's stance on tariffs, making security of energy supply the number-one driver for increased renewable energy generation.

Meanwhile, we're also seeing the end of flat demand curves, since the growth of artificial intelligence and the proliferation of electric vehicles mean renewables are being called on to increase overall generation capacity, rather than simply replacing fossil fuels. All of this is creating an unprecedented opportunity for energy transition investors, argues NTR chief executive Rosheen McGuckian.

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Q How is the European energy transition investment opportunity evolving and what are the biggest drivers today?

There are three principal drivers the growth in European energy transition opportunities. The first involves security of supply. There's a clear recognition at a geopolitical level that energy independence is critical for Europe. That started with the need to reduce reliance on gas piped in from Russia, but the situation has now evolved to include the need to reduce reliance on LNG from the US, especially now that the new Trump administration has started talking about the use of natural resources as a leverage tool for negotiating tariffs.

The second driver is simply demand growth. The latest long-range forecast from Europe's transmission system operators, or TSOs, predicts that there will be around 420TWh of new power required between now and 2030.

That growth in demand is a reflection of the growth, for example, in data centre capacity, the advent of AI and the roll-out of electric vehicles. Even if you cut the TSOs' prediction down to 40 percent, that still means we will see 10 percent growth in the next five years. That might not sound like a lot, but it's worth bearing in mind that we haven't seen growth in the past 10 years. The entire renewables revolution has, until now, been about replacing existing fossil fuel capacity. Now that replacement effect is being compounded by growth.

The third driver is, of course, decarbonisation. Almost 30 percent of the carbon emission reductions required to meet decarbonisation targets by 2030 will come from renewable energy generation itself – in other words, the replacement of fossil fuels in producing electricity. Another 38 percent will come from the electrification of industry, transport and district heating, which will again require additional renewable power.

Q What opportunities are emerging from the energy transition, beyond renewable generation itself?

The growth in renewable energy generation is huge and fast moving. That is necessitating additional investment in what we call electrification enabling technologies such as storage, electrification of heat, new grid infrastructure and new technologies to support increased electricity flow through existing grids. Those electrification enabling technologies are creating significant investment opportunities beyond investment in renewable generation itself.

Q How should managers approach portfolio diversification and why is this so important?

I would start by saying that when we think about portfolio formation, we always focus on the underlying infrastructure qualities of assets. With the recent increase in interest rates, many investors are seeking higher returns, but it's important to ensure that your assets are still able to provide DPI throughout the life of the portfolio, and that you're not overly dependent on assumed future exits or binary plays. We're not venture capitalists, we're infrastructure investors.

And then of course, we look to diversify by technology. We also aim to combine technologies if we can. For example, we may look to combine generation with storage, which provides an opportunity for a baseload-like offering, and then creates added value. We also look to diversify by stage of life. In any given strategy, we like to see a mix of assets that are already operational or close to operational, because those will generate yield from an early stage, together with projects that are in the development or construction phase, which provides added value.

Geographical diversification is also important, of course. We currently operate in seven markets around Europe. Ideally, in any given portfolio, there will be exposure to the windy British Isles and the sunnier Southern Europe, for example. That mix of climate and seasonality is key.

Q Given the breadth and depth of opportunity in the energy transition, how do managers decide where to best deploy their capital?

We've been doing this for 25 years now, and so we're clear about where our specialist expertise lies and that's at the epicentre of the energy transition – the generation of clean power and the enabling infrastructure around that. We're less interested in the broader definition of the energy transition, in terms of things like energy efficiency or EV charging points.

Meanwhile, we focus on the mid-market, prioritising under-the-radar assets that allow us to add value. For example, we may identify two solar projects existing side by side, where neither is currently managing to progress alone.

We may be able to amend the grid connection, redesign the layouts and

source better contracts in order to create a single valuable project. We're not focusing on the latest, untested tech. We are simply using our expertise in the sector to add value.

Q Are there any newer technologies that managers should consider investing in?

We definitely don't look to chase the next big thing. Green hydrogen, for example, was generating a lot of hype, but that's not something that would be for us, at least not right now. Instead, we wait until we can convince ourselves on the fundamentals of any new technology.

One area that we do believe will come to fruition in the next investment cycle, however, is long duration energy storage. LDES has been gaining traction over a number of years, and I think this is a technology that's now on the cusp of becoming really interesting for an investor such as us. We've been tracking LDES since 2009, but the right support and policies are now being put in place. We see that LDES is about to enter the full commercialisation stage.

Q Does that mean the end of lithium-ion batteries?

Lithium-ion batteries are going to continue to play an important role when it comes to storage of up to six to eight hours, although even that is pushing it technologically at the moment.

However, the market has already largely moved on from short-term ancillary services and onto arbitrage, which works better in markets with more volatile merchant prices. It's now poised to start capturing the oversupply of renewables.

If the wind is blowing, we want to be able to capture that energy and hold it for at least 12 hours, which is where long duration energy storage comes in. We're already seeing a number of countries in Europe undertake consultations and start to fund the next stage of LDES projects. I think this is going to be a big feature over the next two to three years.

"There is a clear recognition at a geopolitical level that energy independence is critical for Europe"

Q How is the global geopolitical environment impacting the energy transition opportunity, particularly as Europe and the US appear to be moving in opposing directions?

Europe continues to be very clear and consistent in its overarching policy, which is based around the need to reduce reliance on fossil fuels. That policy position is driven by the decarbonisation agenda, to an extent, but even more importantly it is driven by the need to secure energy resilience and to manage the volatility of energy costs.

The US, by contrast, is the single largest producer of crude oil and natural gas. There's no country in Europe that lays claim to anything close to that. What we do have, however, is an abundance of sun and wind.

Those are our natural resources and so it makes sense that in order to achieve energy independence, we need to focus on what's within our control rather than what's happening in other parts of the world.

There was a brief energy transition boom in the US during the last couple of years under the Biden administration, driven by the Inflation Reduction Act. That boom will no doubt now be weakened, as investors become more cautious about potential policy changes under Trump.

However, there's always been a stop-start tendency to the energy transition in the US. While we do not currently invest in that market, we did up until 2015. During that period, a clear stop start pattern emerged, year by year, in terms of the use of tax credits. Even so, the industry managed to grow.

I think it will continue to grow, therefore, albeit with increased levels of uncertainty, while Europe's approach will continue to be consistent because, as a continent, we really have no alternative. ■