

Building a low-carbon future through alternatives

Innovation across real asset portfolios could drive progress toward a low-carbon economy, says Nuveen's Abigail Dean

How is the current macroeconomic outlook shaping your private real estate strategy?

The surge in inflation since early 2022, and the resulting monetary tightening to control it, have had a significant impact on private real estate. Higher interest rates have triggered a global price correction, particularly in Europe and the USA, that may not be over yet. But while pricing is challenged, the fundamentals for most real estate occupier markets are still strong, with many sectors seeing low vacancy rates and rents holding up well. In fact, the surge in inflation may be helping rents grow faster in sectors such as multi-family and industrial. The combination of weak pricing and strong fundamentals argues for investors to be cautious in the short term, focusing on CRE debt investments and strategic objectives, but they should already be building capacity in anticipation of much better opportunities to come in the next phase of the investment cycle.

Our longer term strategy continues to be heavily informed by the structural mega-trends that underpin real estate demand. Geopolitical events and the pandemic have disrupted some of those trends over the last few years. The rise of hybrid working that was ushered in by the pandemic has been seen as a potential disruptor to urbanization but in reality it has changed the shape of cities rather than reversed their growth. Long term, we still see city populations increasing and expect that to continue. Another trend that is shifting is globalization. There has been much discussion about onshoring over the last few years, although we actually expect 'friend-shoring' (supply chains shifting to countries that are perceived as less risky) to be as strong a trend if not stronger.

Long term demographic trends such as the aging population will drive demand for senior housing, healthcare and medical office and the global shortage of housing underpins an urgent need for affordable housing whilst also supporting a demand for storage.

Alongside global demographic trends, climate and sustainability trends, such as the physical impacts of climate change and the transition to a low-carbon economy, inform our outlook. They will contribute to the growth and decline of various types of real estate occupiers in the years ahead, as well as changes to the types of buildings we're going to need.



Abigail Dean
Global Head of
Strategic Insights
Nuveen Real Assets

Where can the most progress toward achieving your 2040 net-zero target be made?

Our 2040 target is for real estate and our initial focus is on improving the energy efficiency of buildings, through upgrades to heating and cooling systems, lighting and also glazing and insulation in some cases. Beyond energy efficiency, the focus shifts to the electrification of buildings and the roll out of onsite renewable energy.

There's huge demand and growth opportunity in renewable energy which makes the investment case for this asset class very compelling. Technological advancement is making that expansion possible. For example, more effective and competitively priced battery storage combined with the cost competitiveness of cleantech power generation is a real game-changer for the acceleration of the energy transition in developed countries. This will underpin the achievement of net zero across the globe.

In terms of natural capital, timberland and farmland have significant carbon sequestration potential and can play a key role in meeting the global net zero challenge. We need to provide calories for a growing world population, while simultaneously reducing negative impacts on biodiversity and reducing carbon emissions. That means evolving farming and land-management techniques. Again, technology has a role to play, but this long-term trend is driving the demand for land for both timber and farming, and also for renewable energy.

Where did you start with taking on these challenges and seeing the opportunities?

One of the biggest challenges and simultaneously the biggest opportunity is data capture and analysis. Data is key to enabling us to better understand the relative magnitude of the environmental and social impacts of different real asset classes and it is also necessary for us to track the effectiveness of the measures that we put in place.

In our real estate portfolio, good data capture and analysis underpins the work that we are doing to identify the cost of decarbonization measures, the return on investment that we expect these measures to deliver, and the value depreciation that we might expect to see if we do not implement these measures. This helps us to ensure that our net zero carbon program is driven by delivering investment performance.

The challenge is particularly acute for natural capital, where data is fragmented and highly dependent on local contexts. Over the last few years, we've been focussing on getting the baseline data across our circa three million acres of farmland and timberland and piloting natural capital balance sheets. This allows us to start quantifying both the carbon sequestration and emissions as well as the wider value of those assets to society and the environment. For example, we have a large timberland portfolio, which is net positive in that it's sequestering more carbon than it emits. It is crucial that we put in place the systems to accurately monitor and report on this. There's also carbon sequestration potential for farmland. Evolving practices used in farming can reduce the carbon emissions associated with farming, as well as reducing externalities. It's an exciting challenge.

How can you report on nature and biodiversity?

We see an increased focus on this from our clients. Frameworks like the Task Force on Nature-Related Financial Disclosures are very welcome. There's a growing recognition among leaders in this space that climate targets cannot exist without nature and biodiversity goals – the two are inextricably linked. This is central to our natural capital business where this topic is of particular interest to clients, but it is also relevant for infrastructure, private credit, and real estate, as well. In the UK, we now have the Biodiversity Net Gain strategy to develop land and contribute to the recovery of nature. This means that in the UK, with any new development, a 10% biodiversity improvement is required – either on or off-site. We expect to see similar requirements

in other parts of the world. So, when it comes to new development and biodiversity enhancement, we're starting to see drivers from both clients and regulation.

In what specific areas of technology and sustainability have you seen the most recent progress made?

Obviously, in renewable energy infrastructure investments, there's been huge progress. The technology now available often makes renewable energy the cheapest form of electricity. Working with wind and solar and across new areas like battery storage and using green hydrogen in industrial processes will also present new opportunities.

Also, the ability to buy brown buildings, make them green, and then take advantage of that value increase and the rental increase is another area of real progress. But expertise is still needed – it's not always easy to convert a brown building to a green building, and it can be expensive. Any lack of information at the point of acquisition can mean a lack of transparency about how much it's going to cost. However, the cost of decarbonizing a building is getting lower as technologies improve over time. That's a lot of positives.

Where might we see the next breakthrough?

For buildings and real estate, it's the decarbonization of heat and battery storage. It's not currently standard to have battery storage paired with renewables in a building – this will change in the years ahead and bring more sizable on-site renewable installations to buildings.

Another promising development is in data management. We've seen some real advances in that technology for real estate and private credit. The wide range of different energy efficiency technologies and clean energy generation technologies – from floating offshore wind and smart energy grids to decentralized energy generation and green hydrogen – sitting alongside data and process technologies, enables us to manage this across a portfolio. This informs our investment decisions – what to buy, what to sell – and it also helps us to prioritize our efforts, and turn genuine sustainability progress from something piecemeal, into a coordinated approach across the portfolio.

Abigail Dean is the Global Head of Strategic Insights for **Nuveen Real Assets**. In this role she is responsible for the organisation's global sustainability, proptech, and research functions. The team works closely with colleagues across investment, product development, compliance and risk to ensure that our investment strategies in real estate, infrastructure and natural capital are underpinned by an understanding of global megatrends and ESG is integrated into fund and asset management.