Carbon markets bolster timberland investing



Timberland is an ideal natural capital investment, with carbon credits providing a potential additional revenue stream for sustainably managed assets, says Manulife Investment Management's Thomas Sarno

As more and more investors look to integrate natural capital strategies into their portfolios, timberland is proving to be an obvious beneficiary. Thomas Sarno, global head of timberland investments at Manulife Investment Management, says that now is an ideal time to invest in the asset class.

Timberland may benefit from greater demand for wood products, he says, with consumers valuing the sustainability benefits of timber over other materials. Moreover, he says the growth of carbon markets provides another option for generating revenues, in cases where managers can alter management practices to store carbon for longer or

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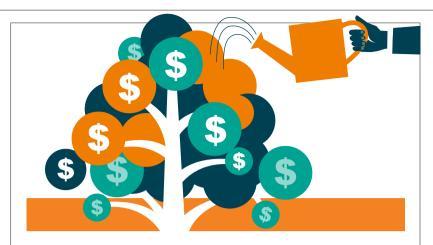
where new forests can be established.

How does timberland fit into a natural capital strategy?

Timberland has been part of the natural capital asset class before the term 'natural capital' was even invented. We've been investing in natural capital in the form of timberland for almost 40 years and we are now the world's largest natural capital investment manager.

During that time, we've delivered sustainable investments that have achieved a range of financial goals through various economic cycles. That historical performance has provided long-term, stable, healthy returns, cash yield, appreciation, imperfect correlation with broader markets and capital preservation and diversification. In an inflationary environment, we have also seen a correlation between timberland returns and inflation. These investment characteristics are supported by sound market fundamentals driven by increasing human need for sustainable fiber and solid wood products.

Ever since our inception, we've been



How can investors know that if they add timberland assets to their portfolio, that managers are capable of enhancing the financial and environmental value of the assets?

When it comes to track record, we've performed very well against the NCREIF Timberland Index across the 40 years that we've been in existence. We have the benefit of a very strong track record, through multiple economic cycles, both in the broader environment and in the timberland space.

In addition, all our timberland properties are third-party certified under the Forestry Stewardship Council, the Sustainable Forestry Initiative, or the Programme for the Endorsement of Forest Certification. That provides another layer of assurance that what we say we're going to do is carried out on the ground in a sustainable manner.

We've been measuring the carbon emitted and sequestered on our clients' assets according to the GHG Protocol for more than a decade. Our carbon projects utilize third-party verification and are registered with leading compliance and voluntary carbon market registries. We've also been investing in both models and modelling capabilities in the form of technology, people and systems to make sure that we can anticipate what will happen in the forest. We can model an optimized pathway so we can report on what has happened in the past and what we expect to happen in the carbon cycles of any forest, at any time.

saying that good stewardship is good business. That's now manifesting itself in the natural capital investment environment. People want to invest in timberland for both its financial attributes, as well as its attributes that support nature, the climate, and other emerging environmental and social priorities.

We very consciously look for natural capital benefits as we select properties to invest in. For example, we recently acquired a 55,000-acre property, spread across 45 parcels in South Carolina.

We thought this would be a great fit for our open-ended timberland fund, partly because of what it offers in terms of traditional timberland economics, but also because of the opportunities around sustainable management.

The site has a lot of potential to store carbon, plus great potential for protecting biodiversity and water resources. It also has some unique attributes as a site of historical significance. All of these attributes, taken together, make this an ideal natural capital investment.

This kind of deal exemplifies why more investors are being drawn to the asset class, because you can get financial benefits and do so much more at the same time.

How are the environmental benefits of forestry supporting the economics of timberland investments?

Sustainably managed timberland provides for the needs of society in the form of wood fiber and wood products. We see those products all around us and it's very comforting to know that they can be produced in a sustainable manner, over and over again, without compromising the future of the planet. That's part of the core thesis.

In addition to that, you can also bring a range of benefits to the local environment with sustainable timberland. Well-managed timberland supports the functioning of ecosystems - healthy forests help us to produce wood fiber, and by producing wood fiber in a sustainable way, we can support water quality, provide clean air, create habitats for flora and fauna, and enhance the other ecosystem services. We believe these characteristics are increasingly assigned tangible value, adding optionality to land management, increasing the investable universe and accretive to returns.

On the carbon front, the trees that we sustainably manage clean the air, produce oxygen through photosynthesis. They also sequester carbon, which is then stored in the form of standing forests and wood products for hundreds of years in some cases.

So taken together, that's why people are really looking at forests and wood products as being part of the solution, particularly in the built environment. We're seeing new innovative construction products in the form of mass timber or cross laminated timber. Those buildings are storing a lot of carbon for the long term in the built environment, and they're getting that wood fiber from sustainably managed forests.

How do you use those models for the day-to-day management decisions around forest properties?

All our forests are optimized annually using linear programming. We have also invested very heavily in utilizing LiDAR, which is light detection and ranging, as a basis for forest inventory. That allows us to increase the level of precision in inventory and take a census approach, rather than a sample approach to inventory. It feeds a tremendous amount of data into the models. We have specialized teams, both in our investment management platform as well as our property management platform, which make sure that this optimized model is sensible on the ground. Our operations teams then work to implement those outcomes.

The modelling feeds into decision-making, beginning with the silviculture investment when we plant a forest. It helps us decide which species to plant, at what density; it also helps us select the right genetics and decide on silvicultural treatments. All that goes into an overall plan for how we're going to manage that forest, not only for a single rotation, but over the longer term. That then results in mid-rotation decisions, whether that be thinning or fertilization or woody weed control, and ultimately the timing of harvest.

What is the outlook for timberland over the longer term?

Timberland is a limited resource. As there are more and more uses for the same amount of timberland, the very fundamental and basic principle of supply and demand kicks in. The additional drivers around the carbon markets could result in the reduction of harvest on some of these available acres, which then produces a change in supply and demand dynamics for core timber products and timberland itself.

Our outlook for the asset class is

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that we expect it to continue to have attractive core attributes. And then the new attributes associated with natural capital, natural climate solutions, and ecosystem services will further drive the realizations in the form of cash appreciation and capital preservation.

How does the possibility of earning revenues from carbon credits affect how you manage timberland properties?

Forests are a top natural climate solution, and the growing use of forestland as a climate change mitigation tool has added new dimensions to timberland investment. We have the opportunity to enhance the function of the forest to actually optimize for capturing and ultimately storing carbon in the form of trees. And carbon markets incorporating both removals and avoided emissions have been established over the last 25 years to help companies support their net-zero pledges. This is creating new opportunities to manage forests for carbon value in addition to timber value.

How carbon revenues affect our management practices really depends on the timberland. Carbon can be an economic factor, but it varies from forest to forest. For example, if you have a very high-value species like Douglas fir, it would take a tremendous carbon price for you to alter your management in favor of carbon.

The ability to generate revenues from carbon markets might lead us to change our management practices to store carbon for longer, in cases where the expected price of carbon would make that financially attractive. We produce a carbon price forecast internally, just like we've always had forecasts for log prices. That gives us the optionality to look at properties and assets, and to determine what is the best way to manage those forests for the compatible benefits.

For example, we're exploring the possibility of a carbon bank at our newly acquired property in South Carolina. This could generate over a million tonnes of carbon sequestration and crediting through reduced timber har-

We only want to offer high-integrity carbon credits and have developed our own internal carbon standards to support this. We look to ensure additionality and permanence with our credits, and to avoid double counting. Additionality is the most important principle - we can't take credit for things that were going to happen anyway. And so, we would need to alter the normal management regime. This would typically take the form of extending rotations to utilize the biological potential of the site to capture more carbon and store it for longer. We utilize our nearly 40 years of sustainable timber management experience and our teammates on the ground to set conservative baselines that underpin our carbon project and credit quality.