INVESTMENT MANAGEMENT

Fertile ground for innovation

Timber and agriculture fund managers are growing, but they are also evolving to incorporate new revenue streams such as renewable energy and carbon credits. Florence Chong reports

Over the past three years, timberland and farmland have bucked the negative global forces of inflation, market volatility and economic softening to deliver strong returns. These returns are about to get even stronger as land-based natural capital assets, particularly timberland, blossom into multi-faceted, income-generating investments from so-called ecosystem services.

Timberland sits front and centre of the global rush to mitigate climate change and slow biodiversity loss. Demand for food continues to increase, heightened by war, inflation, pandemics and economic uncertainty. Food security is a national security issue in many countries that are struggling to feed growing populations and to ensure adequate supply at a time of supply chain disruption.

Yet, compared with other asset classes globally, investment in timberland and agriculture pales into insignificance against, say, real estate and infrastructure. According to PitchBook, a capital market data firm, between 2018 and the first 10 months of 2023, a total of US$3.8bn (€3.5bn) was raised for timberland and US$19.2bn for agriculture (see table).

But the dawn of these two asset classes is here, according to natural capital fund managers, who believe their time has come and that their strategies will attract greater focus from institutional investors.

According to IPE Real Assets research, the 25 largest institutional investment managers of private, nature-based land investments – principally, combining agriculture/farmland and timberland/forestry – manage close to €88bn of assets (see figure 1) – up from €82bn a year ago. The five largest represent more than half of today's figure, managing €52.2bn between them.

The industry is not simply growing passively. It is very much looking to innovate and generate additional value on top of the traditional end-products of providing food, fibre and timber. Although it is early days to put a figure on the potential value of monetising ecosystem services, some believe a ballpark figure of the accretive value to returns from commercial forestry, as an example, could be around 3% annually.

While carbon credits, the most established of ecosystem services, is becoming a significant revenue generator for some timberland managers, the potential big income driver is likely to be renewable energy. Forests could also hum along, offering refuge to all species, including humans seeking an escape from the hustle-bustle of city life – for a fee.

Daan Oranje, managing partner for timberland at Stafford Capital Partners, says: "Forestry is land-rich. The land provides a lot of optionality – to grow trees, farm crops, locate wind and solar farms, or even sell as higher-value lifestyle blocks. Using the US as an example, around 20% of the revenue we derive from timberlands comes from selling forestry land to recreational buyers. It is a well-established market."

Tom Sarno, global head of timberland investments at Manulife Investment Management, adds: "Historically, we've only thought about provisioning basic ecosystem services – food, timber and fibre." But the definition of ecosystem services has now evolved to cover carbon sequestration, flood control, water quality regulation, soil creation, recycling of nutrients, cultural and aesthetic aspects and eco-tourism, among others.

Sarno says that in North America alone revenue generated from "non-timber" assets – ecosystem services, recreation, carbon and land leases to renewable energy operators – make up more than 20% of total timberland revenue. Together, these provide strong and predictable cash flows.

"Increasingly, it is possible to monetise nature repair through conservation easement or through biodiversity credits," he says. "There are new sources of revenue coming into the asset class."

Renewables: wind in the trees

Decarbonisation of power systems has generated investment in photovoltaic and wind installations on forest land and agricultural land in certain locations. Gresham House is an early adopter of the trend to locate wind turbines in forests. Over the past two decades, it has partnered with wind farm operators, and now has a significant number of wind turbines operating across its forestry portfolios in the UK.

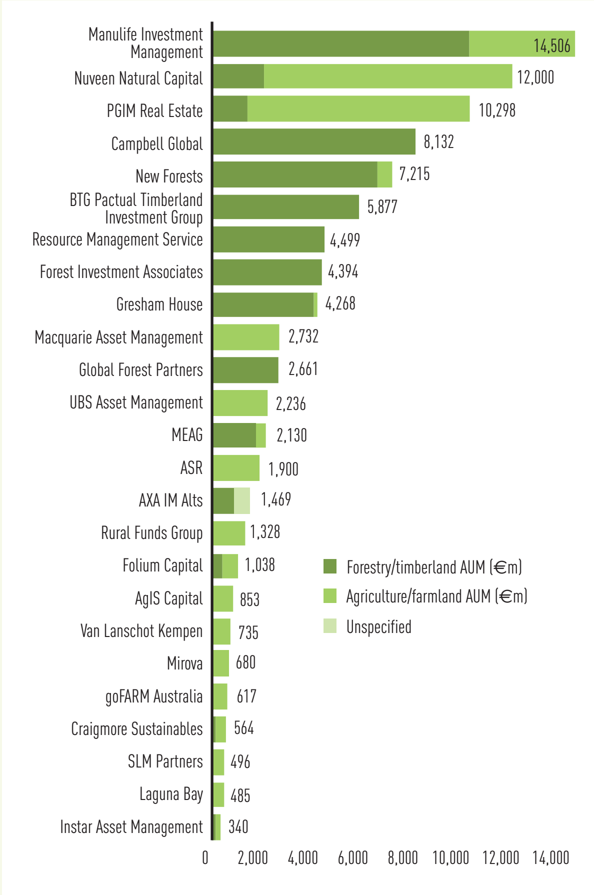
Gresham House's managing director of forestry, Olly Hughes, says: "Historically when you put a wind farm or a wind turbine on a site, you have to remove significant areas of forest because the trees could affect wind flow on the turbines. Then you have to assess the value of your revenue from wind versus the value of the forest.

"This is changing because the wind turbines we are putting into forests now are so much bigger. They may have tip heights of 200 metres-plus, which means they are 40 metres-plus above the forest canopy.

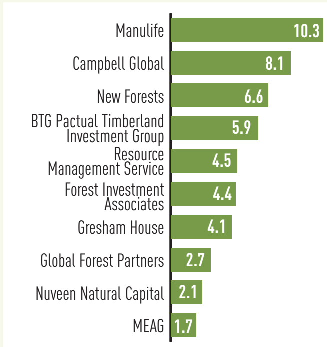
"We are now able to 'keyhole' turbines into the forest, which means you build them in a much smaller area of bare land compared to before and hence increase the level of tree area. This is a very exciting development as you genuinely get more optimised use of the land."

Hughes says that, because of the new developments, more wind turbines are being located in forests. It is a good option, he says, because they tend to be in remote and windy areas of the country, reducing environmental impact on the landscape.

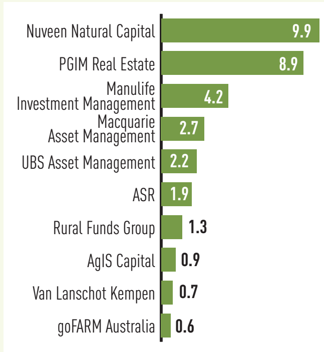
TOP 25 FUND MANAGERS



Top 10 forestry/ timberland (€bn)



Top 10 agriculture/ farmland (€bn)



"Using the US as an example, around 20% of the revenue we derive from timberlands comes from selling forestry land to recreational buyers"

DAAN ORANJE

It is not easy to place a hard value on leasing land for wind energy operations, but for some managers, it is proving to be a valuable revenue source. Hughes says that leasing for wind turbines has been "very lucrative" over the past 20 years or so. "We historically have looked for lease revenues to multiply land values several times compared to just forest growth."

For access to its land, Gresham House either leases the land to wind farm operators or shares revenue generated from the wind turbine. The strategy works so well that, in 2018, Gresham House established a fund that has an allocation for wind assets development to create a balance between forestry and wind cashflows. But, Hughes stresses, the core focus is forestry – "that is what we do". The fund's primary income is derived from timber harvesting and capital appreciation of the forest.

Martin Davies, head of global natural capital at Nuveen, says: "We have land offering windfarm options in Eastern Europe, mainly in Poland and Romania. Some of those options are coming to fruition now."

The rental multiple over an agriculture rental payment, he says, is significant. Depending on location and individual circumstances, the value of a lease to renewable energy operations can range up to 15 times more than the value of timber production. The average value-add across the sector ranges from three to 15-fold.

"The US has brought in community solar legislation and that is underpinning growth in the solar market there," says Davies. "There has been quite an opportunity for us, including in developing energy for our own use. We are heavy users of energy for pumping irrigation water.

"In the Central Valley of California, we have – or are installing – photovoltaics on about 26 individual properties, mostly permanent crop orchards. With the hike in energy prices over the last 12 to 18 months, our own solar energy has been a very significant contributor, as our power costs have been much lower than if we had procured the energy externally."

In time, Davies sees Nuveen involved in more renewable energy projects in other markets, such as Australia and Latin America.

Sarno, who was first involved with wind turbines 18 years ago in the US Northeast, says there are big swathes of timberland area from Virginia to Texas where Manulife IM has large landholdings which could be suitable for generating solar energy.

"We have the ability to work with potential solar developers to find the right sites," he says. "You need to make sure that the sites have no special value, and that the photovoltaics installation

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does not interrupt ecosystems in these areas."

Manulife IM has entered 40 separate options for potential solar locations. "Over the course of 2024-2027, a portion of these will be executed and then we will convert from an annual payment to us under the option agreement to a full 'value-of-land'," Sarno says. "With solar on the site, the land-use category goes from primary forest to 'higher and better use'."

Carbon credits and other revenue avenues

Over the past two decades, forests have become an important contributor of carbon credits into the market. The London-based research firm Refinitiv calculated that the global market in 2022 was €850m. According to a current estimate by Manulife IM, together with Ecosystem Marketplace and Berkeley Carbon Trading Project, the combined size of the global compliance and voluntary forest carbon credit market is US$3.09bn.

Carbon trading, however, began to soften in 2023 after years of rapid growth in the wake of an emerging 'anti-ESG' trend. This will not, however, detract from the value of carbon to managers of natural capital.

Hughes says carbon is becoming very much more attractive as a source of additional revenue for Gresham House. "The core target return of our funds is 6-7%. Carbon units and other income can add another 1-2% to the internal rate of return," he says.

There are two other factors to consider with carbon, he adds. "Firstly, it takes time to generate that income. It is not like a wind turbine, where you get a cash flow from the time the turbine starts spinning. To generate carbon, you have to have additionality. You have to plant new trees – and it takes time for the trees to grow.

"Secondly, carbon-credit markets are evolving across the world, so the certainty of income is less predictable. We don't know what the value of these carbon units will be in the future. This is one reason we strive to ensure we provide as much optionality as possible within our portfolios."

For those already in the market, carbon credits are becoming a revenue source that forestry managers cannot afford to forgo or ignore. Mark Rogers, CEO of New Forests, says the nature-based investment manager has sold about A$500m of carbon credits over the past eight years in the US. In other jurisdictions carbon credits can make up a smaller part of the portfolio. In Australia and New Zealand, for instance, it makes up only 1-2% of revenue.

Other things

Then there is carbon capture and geological storage of carbon dioxide. Sarno says forests can potentially be used for carbon storage and capture – be it through a green pipeline or by using devices to extract carbon from the atmosphere and to inject it into wells below the water table for storage.

A well-established and community-friendly value-add service in the US forestry sector is recreational use. Forestry managers open parts of their forests for activities such as hiking, horse riding, birdwatching or hunting. These activities provide a steady source of income to forestry investors.

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OLLY HUGHES

Hughes says that, in the US and Australia, revenue is being generated from biodiversity easements and conservation easement credits.

New Forests provides forest access for pipeline projects in Australia. "We get decent revenue from leasing the land, which more than compensates for lost income from timber harvesting in that area. We have large tracts of land which are attractive to people needing land access at a single access point," says Rogers.

"The final area of opportunity remains in water," says Hughes. "Flood prevention and water purification are certainly areas we are starting to see generate revenue as utilities look to pay for the planting of trees to prevent flooding and for water purification. This is an opportunity that is evolving and developing."

Challenges ahead

Revenue from such emerging trends is starting to establish additional activities but, as the industry sees it, these will always be mere icing on top of income from growing food and trees.

The World Bank forecasts that global timber demand will quadruple by 2050 in the drive to net zero, with the use of wood products widening to replace carbon-intensive products. In tandem with the demand for wood products is the demand for food, with the United Nations forecasting global population will reach 10bn in 2050.

Oliver Williams, global head of agricultural investments at Manulife IM, says there is limited new supply of farmland in developed markets. "We buy land from farmers who are retiring, or from groups that need capital investment," he says. "We also optimise land use – for instance, converting row crops into permanent planting."

Oranje affirms that demand for land for alternative uses comes at a time when demand for timber is increasing and adding pressure to the overall timber supply. This is especially true in Australia, which already imports more than 15% of its structural lumber needs.

Oranje notes a recent update from the Australian Bureau of Agricultural Economics (ABARES), which found Australia's total plantation area contracted to 1.716m hectares in 2021-22, a reduction of more than 28,000 hectares, and down more than 250,000 hectares since the peak in 2014-15. The majority of this was re-converted to higher-value farmland.

The statistics highlight that it is difficult for timber to compete against agriculture, which plants and receives revenue from a crop every year or twice a year, he says. Trees take up to 30 years to mature. All the while, the investor carries the capital cost of purchasing the land and planting and tending to the trees.

This is especially true for high-quality land in higher rainfall zones, which is why a broader landscape approach to plantation forestry has strong appeal. Oranje adds that land can be managed on a mixed-use basis – the best land for agriculture and the more marginal land for forestry.

PERFORMANCE AND CAPITAL RAISING

NCRIEF Farmland Quarterly Returns*

4Q2022	1Q2023	2Q2023	3Q2023	2023 annual total
3.10%	2.08%	0.80%	-0.26%	5.81%

NCRIEF Timberland Quarterly Returns*

4Q2022	1Q2023	2Q2023	3Q2023	2023 annual total **
4.89%	1.75%	1.71%	1.37%	10.03%

Global Timber Fund Raising (US$bn)

2018	2019	2020	2021	2022	2023*
0.9	0.4	0.3	0.5	0.1	0.8

Global Agriculture Fund Raising (US$bn)

2018	2019	2020	2021	2022	2023*
8.7	6.8	1.1	2.2	0.4	0.0

*Index total market value US$16.4bn
**Index total market value of about US$24.5bn

Source: Table 1 and 2 NCREIF; 3 and 4: PitchBook

Important disclosures:

Ranking from IPE Research as at December 2023, based on total AUM (euros).

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