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A TIMBERLAND INVESTOR'S PERSPECTIVE ON FOREST CARBON

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Introduction

The threat of climate change is one of the most pressing issues facing the global community today – and investors are playing an important part in addressing global warming through both their investment activities and the environmental, social and governance (ESG) policies they are embracing.

One obvious way for investors to influence climate change is by investing in sustainably-managed timberlands. Forests are natural accumulators of carbon dioxide, the greenhouse gas (GHG) scientists believe is most responsible for global warming. Trees draw carbon dioxide from the atmosphere and combine it with sunlight and water to produce wood. The ability to trap and hold carbon for long periods of time in a stable state, like trees and the long-lived products produced from them, including lumber and furniture, has real monetary value because it is a key strategy for addressing climate change. As a result, large and active markets have emerged across the globe where units of sequestered carbon (carbon offsets) are priced and traded. This is increasingly providing timberland investors with opportunities to generate enhanced financial returns from their assets and to simultaneously play an important role in helping to mitigate global climate change.

Markets for Carbon for North America and Globally

One of the largest compliance markets for carbon is California. The U.S. state has set a goal of reducing and offsetting its carbon emissions by 40 percent below 1990 levels by 2030. About a quarter of that target will be achieved through a cap-and-trade system of carbon credits. Some carbon capture and offset projects based outside of California, including some that are forest based, can qualify to participate in the program. California is part of the larger climate effort known as the Western Climate Initiative (WCI), which includes the Canadian provinces of Ontario and Quebec. In turn, the carbon compliance market is expected to grow as the WCI grows.

On a global scale, more than 170 countries have signed the Paris Agreement, which emerged from the 2015 United Nations Framework on Climate Change's Conference of the Parties. Countries that signed the Paris Agreement pledge to lower their carbon emissions in order to prevent global average temperatures from rising more than two degrees Celsius above pre-industrial levels. With that pledge, many countries plan to implement various programs to reduce carbon emissions, some of which include cap-and-trade components. The Paris Agreement also raised the awareness of private organizations about climate change, which encourages businesses to make new commitments to reduce carbon through participation in voluntary carbon markets.

There are two types of markets driving demand for carbon offsets – mandated markets and voluntary markets. The world's mandated carbon markets – also known as compliance markets – are structured around governmental mandates that require companies, organizations and even governmental entities to cap the amount of greenhouse gas emissions they produce and to purchase carbon credits produced from registered carbon reduction and sequestration projects to offset the excess of the amounts emitted over the amounts allowed under the cap. Mandated carbon offset markets are often described as cap-and-trade compliance markets. Voluntary carbon offset markets provide individuals, organizations and companies with the ability to voluntarily offset some or all their GHG emissions by purchasing carbon offsets



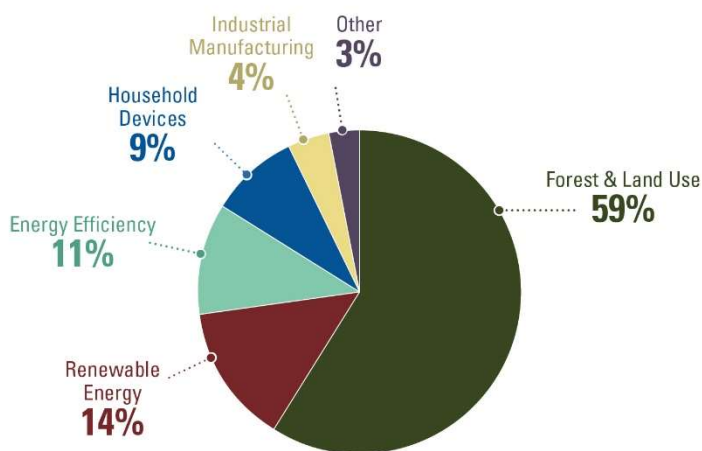
produced from registered carbon reduction and sequestration projects (see sidebar for more details on both types of carbon markets).

The world's mandated carbon cap-and-trade compliance and voluntary markets are significant. The California Compliance Market, for instance, which is one of the largest cap-and-trade markets in the world, is expected to generate \$2 billion to \$8 billion in carbon offsets by 2020. In the world's voluntary markets, more than \$300 million in carbon offsets are already sold each year. Major U.S. companies, such as Apple, Disney, Microsoft and Lyft are among those acquiring these voluntary carbon offsets, and they are doing so to demonstrate their commitment to social responsibility and environmental awareness.

This is the origin of the opportunity that is prospectively available to timberland investors.

Most of the registered carbon sequestration projects (59 percent) that are producing carbon offsets for sale on the voluntary carbon market exchanges around the world are land or forest based (Figure 1). The key question is whether deliberately producing and monetizing carbon credits through these exchanges is an effective strategy for institutional timberland investors to enhance the performance of their portfolios. This paper offers an introductory primer on the role carbon offsets could play within a broader timberland investment strategy. It also explains how carbon offsets (often referred to as carbon credits) are generated by forest assets; what is required to account for them and package them for sale; and under what circumstances it could be beneficial for a timberland investor to sell carbon offsets in one or more of the global cap-and-trade or voluntary markets.

Voluntary Carbon Offsets Issued in 2018 Q1
by Project Category



Source: Forest Trends – Voluntary Carbon Markets Insights 2018 Outlook and First Quarter Trends.

Figure 1. Breakout by project category of the 15.8 million tonnes of global voluntary carbon offsets issued in the first quarter of 2018.

How Forest Carbon Fits into Our Climate Change Effort

Let us start with the basics. The basic unit of trade is the *carbon offset*, also known as a *carbon credit*. The terms can be used interchangeably. Labeled as tCO₂e, a carbon credit or offset represents the removal of one metric ton of carbon dioxide (CO₂) from the atmosphere, or its equivalent heat-trapping value from other greenhouse gases, such as methane.



Basic Mechanics of Creating Carbon Credits

Carbon credits are typically generated by projects or initiatives that are deliberately undertaken to either reduce carbon output or promote long-term carbon storage. Among other things, such projects and initiatives might feature the utilization of renewable energy sources and technologies in place of fossil fuels; taking significant steps to improve energy efficiency in a buildings, facilities and processes; or, managing a natural resource, like a forest or grassland, in ways that further promote the capture and storage of carbon and other types of greenhouse gases (GHGs).

Irrespective of their source or origin (a project or initiative), carbon credits are produced by measuring and estimating the difference between a determined baseline level of carbon storage or emission and a final level. When a project or initiative sequesters carbon (or prevents the release of carbon into the atmosphere) above that baseline level, credits can be earned. However, that higher, differential stock of carbon must be held or otherwise maintained for a long period of time for a carbon offset to have value and to be recognized by the market. Carbon offset projects that produce credits targeted for sale in the voluntary carbon markets typically have a minimum hold of 40 years, while those targeted for sale in cap-and-trade compliance exchanges may require holding periods of 100 years or longer.

Regardless of their origin or market destination (the compliance or voluntary markets), carbon credits must be developed in accordance with the parameters of an established standard or protocol. Under that protocol, the carbon project is validated and verified by a third-party organization. Once that validation occurs, the credits can be issued through a carbon registry. At that point, the credits can be sold from the credit producer to the credit user. As was explained earlier, the credit user or buyer is typically an individual, company, organization or governmental entity that is striving to offset and mitigate its carbon emission footprint – either to meet legally-imposed governmental standards or for voluntary reasons. Sometimes, carbon credits are sold through intermediary brokers, whose responsibility it is to seek and find a buyer or buyers. Once a carbon credit is claimed as an offset to the buyer's own carbon emissions, it is retired. Marked as such in the registry, retired credits cannot be resold, nor can they be double-counted by a different carbon emitter.

Carbon Protocols

The leading global protocols for developing carbon credits are the American Carbon Registry, the California Air Resources Board, the Climate Action Reserve, the Gold Standard, and Verra's Verified Carbon Standard. All these standards have common requirements for carbon offsets. The carbon credits offered through them must be:

- **Real:** It can be proven that the credit represents carbon that has been taken out of the atmosphere or that was prevented from being released into the atmosphere.



- **Additional:** The credit must represent a gain in global carbon stocks that otherwise would not have occurred.
- **Measurable:** The credit must lend itself to as accurate a measurement as possible of the carbon emissions that have been stored or avoided.
- **Verifiable:** A third-party auditor must be able to validate that the offset actually has been generated.

Difference Between Compliance and Voluntary Markets

From the perspective of a carbon credit producer, such as a forestland owner, there are two practical differences between selling credits in a mandated market and in a voluntary market.

First, the world's compliance markets often have restrictions on the locations and types of carbon projects from which carbon credits can be bought and sold. For example, California's compliance market requires that offsets be produced from the lower 48 states of the United States and the coast of Alaska; and the majority of these must be from projects or initiatives based in California itself. Carbon credits from other countries are not eligible to be offered or sold on California's carbon exchange. By comparison, voluntary markets trade carbon credits from any country as well as those sourced by any means. A second difference is that credits sold in the compliance markets often command a higher price and are more stable than those transacted in the voluntary markets.

Voluntary carbon markets are more variable by nature than the compliance markets because of the varied features and characteristics of the carbon credits they make available for purchase. In short, not all carbon credits are created equal. Projects that offer social or environmental benefits can command premium prices over those that do not. For example, carbon projects that also protect sensitive ecosystems, or that help coexisting native communities in emerging economies, may achieve higher price points than projects or initiatives that have more conventional or limited-impact characteristics. Higher prices also can be earned if a carbon project meets a more demanding or stricter protocol than others of its kind.

How a Forest Creates a Carbon Credit

Forest owners can create carbon credits for sale in both the cap-and-trade compliance and voluntary carbon markets in three ways:

1. **By instituting improved forest management regimes on their lands**, which ultimately leads to more carbon stocks being concentrated in the trees and soil than was the case previously.



2. **By practicing afforestation or reforestation**, which creates a new forest where one did not previously exist, or where one may have existed in the recent or distant past.
3. **By taking steps to avoid conversion to another land use**, which preserves a forest that might otherwise have been lost or degraded as a result of human encroachment or climate shifts (Such undertakings are often described as REDD+ projects, or Reduced Emissions from Deforestation and Forest Degradation, as prescribed by the United Nations Framework Convention on Climate Change (UNFCCC)).

As a general rule, improved forest management projects are more common in developed markets such as the United States and Western Europe. Afforestation, reforestation and avoided conversion (i.e., REDD+) are more common in developing economies, such as Latin America, Southeast Asia, and Sub-Saharan Africa.

Despite the many ways in which trees store carbon, not all forests are suited for the development of carbon credits. These are three of the more common obstacles and constraints a forest landowner may face when trying to create and monetize carbon credits.

1. A forest property that is being considered for the establishment of a carbon project cannot have any existing legal constraints that prevent the project's development or that place limits on timber harvesting. Pre-existing restrictions such as conservation easements, for instance, can disqualify a forest from producing credits. This is because the carbon that is currently stored in its trees, and the additional carbon that will be stored in them in the future, already may be protected under the terms of the easement.
2. Another condition forest owners often face is that they must practice a stringent level of forest management on any lands that are intended to be the source of carbon credits. This is to ensure that a constant or increasing stock of carbon remains resident on the property during the established carbon sequestration holding period.
3. Finally, any forest that is to be the source of carbon credits must feature biodiversity characteristics, including habitat for native species.

For these and other reasons, careful consultation with a forest carbon specialist is required before a carbon forestry project can be launched.



Revenue Potential from Forest Carbon

Assuming a forest has the characteristics necessary to produce verifiable carbon credits, the kinds of revenues timberland owners might generate from such projects can vary widely. Among the factors that come into play are: a) the current stocking of trees and other vegetation; b) the productivity of the attendant soils; and, c) the quality of the forest management that is to be applied. As a general rule, however,

Table 1. Experienced ranges of first-year and annual gross revenue of forest carbon projects in different regions of the United States.

United States Region	1 Year (US\$/acre)	Annual After 1 st Year (US\$/acre)
Pacific Northwest	\$800 - \$1,200	\$20 - \$40
Coastal Alaska	\$300 - \$1,000	\$10 - \$20
Inland West	\$200 - \$1,000	\$10 - \$20
Southeast Hardwood	\$200 - \$800	\$10 - \$30
Southeast Softwood	\$150 - \$200	\$10 - \$20
Lake States	\$100 - \$400	\$5 - \$20
Northeast	\$100 - \$250	\$5 - \$10

Source: Finite Carbon at the University of Georgia 2017 Timberland Investment Conference, Amelia Island, FL.

improved forest management carbon projects usually generate one to ten credits per acre (or 0.4 to 4 credits per hectare) each year over their first ten years. The average price of credits produced from forest carbon projects has been in the range of \$8 per credit but has ranged from less than \$4 to more than \$15¹ per credit. Table 1 on the left shows revenue ranges for forest carbon projects across various regions of the United States.

Developing a Forest Carbon Project from Start to Finish

There are a variety of approaches that can be used to generate carbon credits from a forest investment. In this white paper, we will highlight the most commonly employed method.

Within a timberland portfolio, an investor's timberland manager (or TIMO²) may identify certain forest assets that may be good candidates for generating carbon credits. At that point, the manager would hire a specialist known as a *carbon offset developer*, or *offset project operator (OPO)*. The project developer brings the expertise and resources needed to successfully execute a forest carbon project. This includes determining the forest carbon stocks available in the targeted forest assets, selecting the right carbon protocol for establishing and quantifying those stocks, designing the project, modeling future carbon stocks, and registering the offsets that will be produced. The same project developer also may assist in marketing and selling the carbon offsets.

¹ Jane Rice and Ben Guillon, "Carbon Crediting" on Western Landowners Alliance website (July 19, 2018)

² TIMO stands for Timberland Investment Management Organization, the common term for investment managers that focus on the timberland asset class.



Steps Involved in Developing Forest Carbon

The schedule on the following page (Table 2) illustrates and explains the whole process. An investor should understand that each forest carbon project is unique, so there are many permutations and variations to the protocol that is provided here.

Typical Management Features of a Forest Carbon Project in North America

- Harvest must never exceed growth
- Employ natural forest management
- Even-age harvest where no more than 40 acres (16 hectares) can be cut at one time
- Must be certified for sustainable forestry, such as the Sustainable Forest Initiative (SFI), Forest Stewardship Council (FSC), or the American Tree Farm System (ATFS). Alternatively, it needs to be under a state or federally approved management plan.

Source: Finite Carbon

Having one's TIMO hire a forest carbon developer is not the only option available to investors. A TIMO also can form a sole partnership with a preferred carbon project developer. Together, they can administer the investor's timberland portfolio with a focus on conservation-oriented forestry, in general, or for the production of carbon credits, in particular. Alternatively, a TIMO that has acquired sufficient experience and expertise in the development of carbon credits might directly provide many of the skills and functions required to launch and manage a forest carbon project. This vertically-integrated approach means the carbon developer and timberland manager as essentially one and the same.



Table 2. Typical Steps in Developing a Forest Carbon Project

- 1 **Identify Candidate Carbon Project in Investor's Portfolio**
The investor's timberland manager (TIMO) identifies a forest asset within the investor's portfolio that has the potential to generate carbon offsets and determines that the project is supportive of the investor's goals and objectives.
- 2 **Select Forest Carbon Developer**
The TIMO selects a carbon developer who will assess the feasibility of the project. If the project goes forward, the carbon developer will partner with the TIMO and play the role of project leader with a focus on developing the forest carbon offsets.
- 3 **Assess Feasibility of Project**
The carbon developer will review the targeted forest's existing forest plan and inventory and conduct an on-site assessment. Based on these analyses, the developer will review with the TIMO whether the forest property is suitable for hosting a carbon project.
- 4 **Measure and Model Inventory; Develop Management Plan**
Upon receiving the green light to move forward, the carbon developer will perform a full-scale carbon inventory of the forest. Field measurements in the forest will be made. With that data in hand, a carbon model that projects future carbon stocks will be created and a management plan will be developed.
- 5 **Register Carbon Credits**
The project plan along with the supporting documentation is submitted to the carbon registry / protocol that has been chosen by the TIMO and the carbon developer. If everything checks out with the project, the registry will offer preliminary approval, subject to third-party verification.
- 6 **Seek Third-Party Verification**
An independent carbon project verifier will then review the plan and check that the data and modeling are valid and accurate and that the associated management plan is being implemented on the ground.
- 7 **Issue Carbon Offsets**
After a successful third-party verification audit has occurred and a registry fee(s) has been paid, the carbon credits will be issued. An initial tranche of carbon credits is usually released shortly thereafter. With many forest carbon projects, there are successive releases of credits over the course of a decade or longer as the forest that hosts the project sequesters more carbon over time.
- 8 **Market and Sell the Offsets**
The carbon developer lists the offsets for sale. If the credits are being marketed in the voluntary market, the developer (or a chosen marketer or broker) will tap its network of contacts to directly identify a suitable buyer.
- 9 **Share the Resultant Revenue**
Proceeds from the credits that have been sold will first be allocated to cover project costs. The remaining revenue will be split between the forest owner and the developer. A common breakout is a 50:50 split.
- 10 **Verify Stock on an Ongoing Basis**
The process does not end with the sale of the carbon credits. All forest carbon projects, whether they are producing credits for the voluntary or compliance markets, require periodic audits. These typically occur every six years or so. In addition, new field measurements of inventory are taken every 6 to 12 years. Part of the fee stream at the point of registration includes funding for an endowment to cover these monitoring and verification expenses over the life of the carbon project, which typically can last from 40 to 100 years.



Payout of Credits in a Forest Carbon Project

For a forest carbon project that produces credits based on the implementation of improved forest management techniques, there is usually a sizeable initial payout of credits (See the illustration in Figure 2). That first payout could be followed by a series of smaller payouts over a decade or more as the forest continues to grow and as additional carbon is stored in its trees. However, if such a forest also undergoes sustainable harvesting during the period, which essentially means harvesting timber volumes that are equivalent to the amount of additional volume that is being added through new growth over time, the forest's carbon stocks will remain flat and no additional credits will be available for sale in those subsequent years.

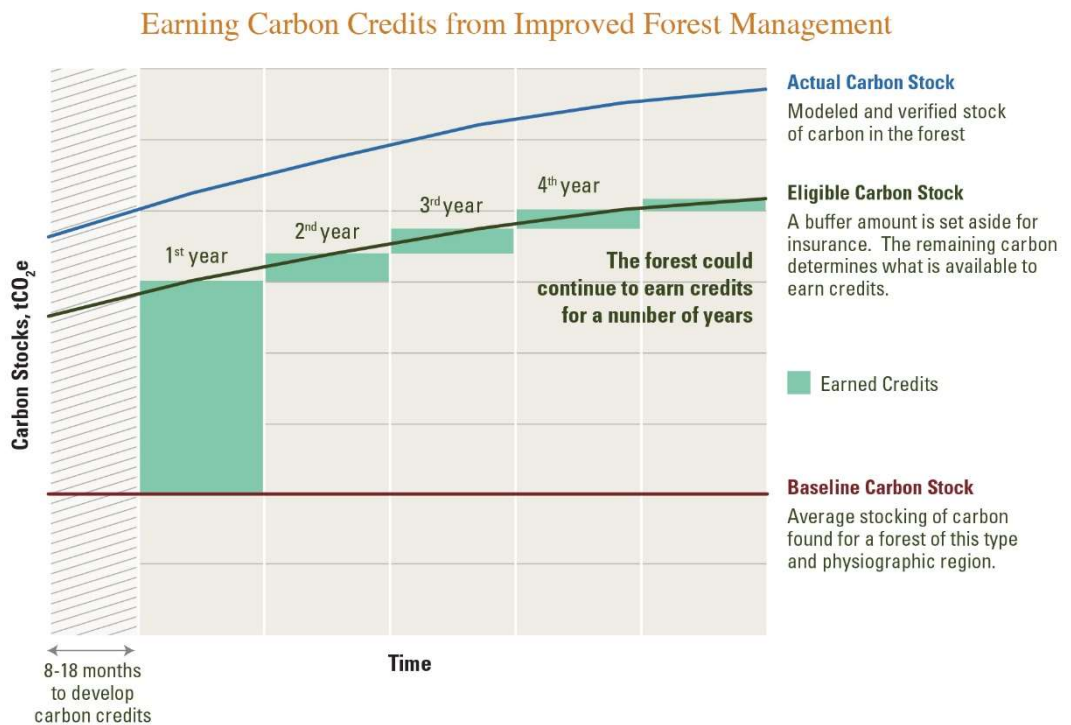


Figure 2. Chart illustrating how an improved forest management carbon project can earn carbon offsets over time. The green bars represent the amount of carbon offsets issued to the forestland owner.

As was explained earlier, a forest property that is being managed to produce carbon offsets does so by storing carbon through time at a level above a pre-established baseline. However, to protect buyers of carbon offsets, most carbon standards and protocols require that project sponsors establish associated risk pools by reserving rather than monetizing a certain amount of their projects' carbon stocks. These reserves are insurance against forest losses caused by natural and weather-related events, like pest infestations, diseases and storm, which can kill, damage or destroy



trees that were the initial source of some of the carbon credits that the project sponsor may have sold.

A different payout occurs when a forest carbon project is managed to prevent carbon emissions that otherwise would have been released into the atmosphere because of deforestation or forest damage (also known as REDD+ -- See illustration in Figure 3). In this case, the baseline is the carbon stocking when the forest is replaced by grassland, agriculture, or other land uses if nothing else is done to protect the land as a forested landscape. Most carbon protocols meter the issuance of earned carbon offsets across many years, sometimes as long as three decades. In addition, it a REDD+ forest carbon project also raises the carbon stock of a land base through better management, that additional growth will add to the earned credits.

Earning Carbon Credits from Avoided Forest Loss (REDD+)

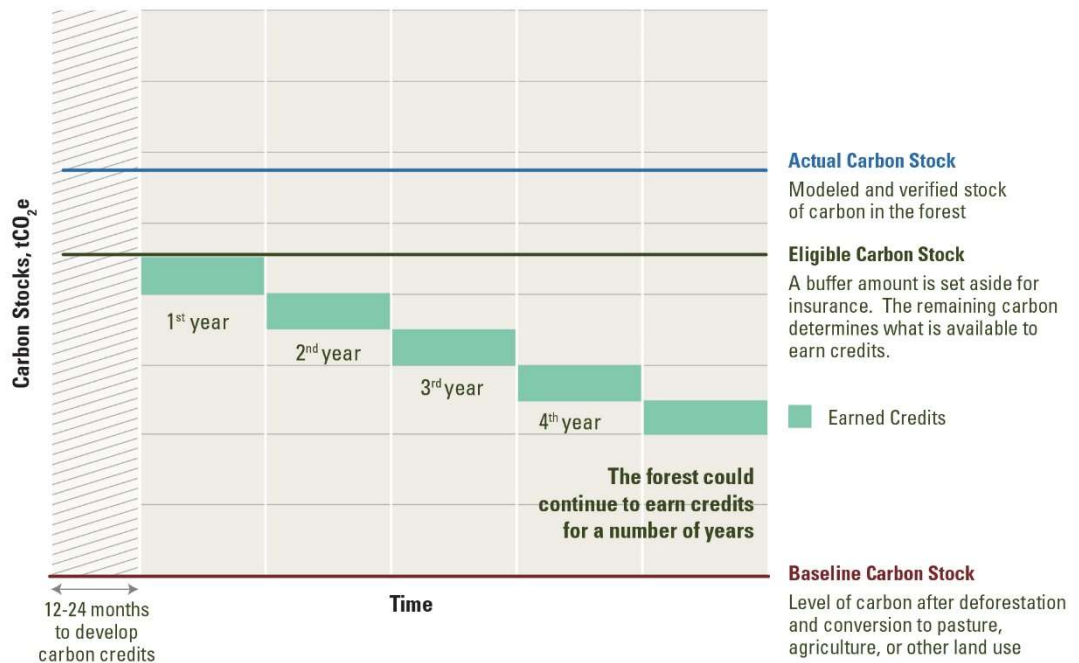


Figure 3. Chart illustrating the payout of carbon credits for a carbon project that prevents a forest from being deforested or degraded, as defined under the United Nations' REDD+ standard. The green bars represent the amount of carbon offsets issued to the forestland owner.

Premature Termination of a Forest Carbon Project

When a forestland investor sells a property that includes a carbon project, the legally-bound terms of the carbon project carry over to the new owner. For this



reason, carbon-based encumbrances can have a material effect on the market value of a forest property. If an owner wishes to terminate a carbon project before selling the asset, it is responsible for refunding the value of the credits that the project has generated. There may also be penalties imposed by the carbon protocol that was employed to issue the credits.

Benefits of Adding Forest Carbon Credits to a Timberland Portfolio

This white paper has explained how investors can generate carbon offsets from their forest assets. However, the next obvious question for a timberland investor to explore is the benefits associated with monetizing the carbon stocks resident in one's forest assets. Essentially, there are three reasons to consider developing a forest carbon project on an institutional timberland holding.

Enhanced Income and Return

First, forest carbon projects can create new revenue streams. Carbon offsets are viewed as one of a diverse collection of non-forest values, called ecosystem services, that are being commonly monetized by many institutional timberland investors today. Other types of ecosystem services include (a) leasing forest land for recreational use (such as hunting); (b) selling conservation easements to protect sensitive lands and wildlife habitat; (c) establishing wetland, stream and grassland mitigation banks; and, (d) hosting renewable wind, water and geothermal energy projects as well as utility right of ways. In other words, forest carbon is one of several, non-timber, forest-based, income-generation levers that investors can pull to boost the returns of their forest assets. As was referenced earlier, it is important to recognize, however, that there often are tradeoffs. Creating a carbon project on a forest property can limit or prevent timber harvesting and the income it can produce. However, as long as this loss can be more than offset by the sale of carbon credits – and possibly the monetization of other ecosystem services – the payout can be financially rewarding.

Portfolio Diversification

The second potential benefit for developing forest carbon credits is risk reduction. Carbon markets, be they markets for either compliance or voluntary offsets, can be quite volatile. For that reason, they feature little or no correlation to timber and land markets. Consequently, including the sale of carbon offsets from a forest asset can add a measure of diversification to a portfolio's revenue and total return profile, which in turn could lower its risk profile.

Non-Tangible Rewards

Third, and finally, sponsoring forest carbon projects may be attractive to those interested in impact investing. Impact investing means investing with the intention



of making a positive contribution to the health and well-being of society and the environment while also striving to achieve financial returns. In short, forest carbon projects can help investors meet their *environmental, social and governance* (ESG) objectives. The appeal of forest carbon projects to ESG-oriented investors is that the non-tangible social and environmental benefits they produce often go beyond mitigating global climate change. Most forest carbon projects, in fact, offer a host of peripheral benefits. Among others, these can include helping to preserve watersheds for clean water, creating recreation and sightseeing opportunities, and conserving biodiversity. In a developing economy, protecting a forest from deforestation through a REDD+ carbon project also may support local, rural economies by providing jobs and sources of forest-based products for indigenous communities. Examples can include eco-tourism, the harvesting of tree fruits, and the production of honey.

Features of a Good Forest Carbon Investment

Timberland investors that are interested in forest carbon should be aware of the size and scope of the carbon market relative to the timber market. To put this in context, over \$7 billion worth of timber was harvested and sold in the United States³ in 2017 while carbon offsets from forestry projects amounted to about one-fiftieth of that amount, or less than \$150 million a year.⁴ In other words, forest carbon is a small, niche market. However, under the right circumstances, forest carbon can make a meaningful contribution to the performance of an investor's portfolio. The checklist in Table 3 below offers some guidelines for assessing whether a particular forest has the characteristics necessary for hosting a carbon project. Listed are favorable qualities (in green) and unfavorable (in orange) qualities that indicate whether a forest asset is either well or poorly suited to be managed for the production of carbon credits.

³ RISI: applied total harvest volume of sawtimber and pulpwood to average stumpage prices for 2017.

⁴ Ecosystem Marketplace, *Voluntary Carbon Markets Insights: 2018 Outlook and First-Quarter Trends*.



Table 3. Checklist for a successful forest carbon project. The items in the green column are features make a forest asset more attractive for a carbon offset project. Items in the red column are features that makes a forest carbon project less desirable.

Forest Features

Supports Forest Carbon Potential	Detracts Forest Carbon Potential
<p>Stocking of Trees Above the Norm The forest’s current stocks of carbon are well above average for that region and species-type, which could allow for a large payout of carbon credits in the first year of offset issuance.</p>	<p>Strong Commercial Timber Potential Timberland located on productive soils may generate more timber-related income than can be produced from carbon sequestration. Generally, timberland that can produce a 2 percent or greater cash yield from commercial timber harvesting are better suited to be owned and managed for timber rather than carbon production.</p> <p>In the Path of Economic Progress Forests that are located in areas that are feeling population pressures can provide significant upside potential for investors because land values can be expected to rise in future years. Such forests can reach a higher-valued use through conversion to croplands, mineral extraction and either or both commercial and residential development. As a result, the existence of a carbon offset project on such a property will, in most cases, prevent its owner from capturing this higher value.</p>
<p>Large Stocks of Low-Value Trees Much of the standing timber includes species of low commercial value; the property is located on terrain that is difficult to operate; and, or, the property is situated a long distance from mills, which makes it challenging to sell timber cost effectively.</p>	
<p>Good Potential to Grow More Carbon With the right care and management, the forest can be expected to store significantly more carbon over the anticipated holding period.</p>	
<p>Complimentary Ecosystems Services are Available Alongside carbon sequestration, the forest also can produce other ecosystem services that can be monetized, such as clean water, recreational leases, ecotourism, conservation easements, and wetlands mitigation banking.</p>	
<p>Spillover Benefits to Neighboring Economy In economically challenged regions, such as those found in certain developing countries, the protection and management of a forest can assist the local community and regional economy. This is a boon to investors that are interested in creating and capturing ESG values.</p>	
<p>Future Buyers Will Accept Carbon Encumbrances When the investor decides to exit the investment, future buyers of the property are willing to accept the legal encumbrances that will come with the carbon offsets without insisting on significantly discounted pricing. These may be owners who are interested in owning the forest for its aesthetics or its recreation or conservation features. Such buyers typically include individual private landowners, government agencies, foundations, and private conservation organizations.</p>	
<p>Sufficient Size to Achieve Economies of Scale The costs to measure, model, register, and monitor the carbon benefit from economies of scale. Properties should be at least 5,000 acres (2,000 ha), but ideally 20,000+ acres (8,000 ha) in size to be profitable to the forestland owner.</p>	



Conclusions and Recommendations

Managing a forest asset for carbon production should not be viewed as an alternative to managing it for more traditional uses, especially timber production. More often than not, a timberland property that is stocked with valuable timber and that is located in robust timber markets is better suited from a financial standpoint to be operated with a traditional management regime – one that focuses on sustainable timber production. In other words, unless they set out to pursue a dedicated carbon forestry strategy, investors generally should view the production of carbon offsets as a supplemental extension of a traditional forest management strategy – one that may help them achieve more competitive and more diversified financial returns.

The ESG advantages associated with developing carbon forestry projects are another consideration. Carbon projects, by design and intent, help preserve and protect the environmental features and societal benefits of working forests such as clean air, clean water, wildlife habitat, recreational opportunities and aesthetically-pleasing view sheds. Whether carbon credits are developed or not, sustainably managed forests already produce one of our most important renewable resources – sustainably-grown wood, which provides the world with building materials, paper, packaging, bioenergy for heating and power generation, cellulosic biofuels, cellulosic fibers for diapers and clothing, and bioplastics. Enabling our global economy to use wood instead of steel, concrete, and fossil-fuel based plastics and fibers, in and of itself, promotes sustainability and reduces greenhouse gas emissions.

The decision to view the production of forest-based carbon offsets as a primary, secondary or supplemental investment strategy really depends on the needs and interests of the investor. However, it is important for investors to be realistic about the potential of monetizing forest-based carbon. The market potential for forest carbon is limited and it can be challenging to place large amounts of capital in the space at any given time. Having patience and remaining focused on selecting a quality manager are essential, but the rewards of participating in the sector can go beyond the simple generation of enhanced returns to making a difference in the world for generations to come.



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