THE 2023 FARM BILL AND THE GROWING CLIMATE SOLUTIONS ACT

The 2023 Farm Bill

The Farm Bill, which directs America’s agriculture policy, is, generally speaking, on a five-year schedule. While some Farm Bills are delayed, causing the previous bill to be extended, Congress aims to complete a Farm Bill every five years.
The current Farm Bill, the Agriculture Improvement Act of 2018, expires on 30 September 2023, and interest groups supporting farmers, foresters, and ranchers are gearing up for 2023 Farm Bill negotiations.

On 29 April 2022, the Senate Agriculture Committee held its first field hearing on the 2023 Farm Bill at Michigan State University, Michigan’s land-grant college and alma mater of Sen. Debbie Stabenow (D - Michigan), Senate Agriculture Committee chair. The field hearing for the committee will be in Arkansas, home of Ranking Member John Boozman (R - Arkansas) was on 17 June 2022. The House Committee on Agriculture has had a number of hearings to review various titles in the current Farm Bill.

While work on the 2023 Farm Bill has begun, the midterm elections may see the bill reshaped; pollsters and pundits are predicting a flip in the House to put Republicans in control and possibly a change in Senate leadership as well. Therefore, Democrats who run the House and Senate Agriculture Committees today may see Republicans take control before the Farm Bills are finalized, potentially resulting in changes to draft bills.

**Growing Climate Solutions Act**

Chair Stabenow has discussed the importance of including climate provisions in the 2023 Farm Bill, and regardless of whether she or Sen. Boozman has the gavel after the midterms, it seems likely that the Growing Climate Solutions Act (GCSA) will be included in the final bill.

The GCSA would create a new program at the Department of Agriculture to assist farmers, ranchers, and private landowners in developing and enrolling projects in voluntary carbon markets: the Greenhouse Gas Technical Assistance Provider and Third-Party Verifier Certification Program.

The bill also authorizes an Advisory Committee to counsel the Secretary of Agriculture on development of the programs, and directs the U.S. Department of Agriculture (USDA) to publish on its website information regarding how to become a certifier or verifier, as well as information about carbon market programs and registries that allow participation from farmers and ranchers.

According to Senate GCSA sponsor Mike Braun (R - Indiana), the GCSA will help address climate change “by breaking down barriers for farmers and foresters interested in participating in carbon markets so they can be rewarded for climate-smart practices.”

Under the Greenhouse Gas Technical Assistance Provider and Third-Party Verifier Certification Program, the USDA will certify experts to help farmers, foresters, ranchers, and private landowners develop projects that prevent, reduce, or mitigate greenhouse gas (GHG) emissions or sequester carbon; quantify the reduction or avoidance of emissions; and enroll in voluntary carbon markets.

The bill provides a list of projects as examples of those that can receive technical assistance and verification, including land or soil carbon sequestration; emissions reductions derived from fuel choice or reduced fuel use; livestock emissions
reductions, including those achieved through feeds, feed additives, and the use of byproducts as feed sources; manure management; on-farm generation; energy feedstock production; reforestation and forest management, including harvesting practices and thinning diseased trees; prevention of the conversion of forests, grasslands, and wetlands; restoration of wetlands or grasslands; and grassland management, including prescribed grazing.

Farmers, foresters, and ranchers traditionally have not had access to reliable information about how to participate in carbon markets. The GCSA aims to address that problem so that U.S. agriculture producers can realize economic benefits from the carbon credit revenue they generate.

**GCSA Politics**

The GCSA passed the Senate in June 2021 with a 92–8 vote. It has 54 cosponsors, including 18 of 24 members of the Senate Agriculture Committee. The bill was introduced in the Senate by tree farmer and Agriculture Committee member Sen. Braun and Agriculture Committee Chair Stabenow. Sen. Boozman, Senate Agriculture Committee Ranking Member, is an original cosponsor.

In the House, the GCSA was introduced by Reps. Abigail Spanberger (D - Virginia) and Don Bacon (R - Nebraska). The bill has 80 bipartisan cosponsors. The House bill, however, has not moved through committee to the House floor, as House Agriculture Committee Ranking Member Glenn “GT” Thompson (R - Pennsylvania) raised concerns about the bill, stating, “The consequences of government intrusion into voluntary carbon markets have not been adequately explored and Congress should continue educating itself and vetting these issues before legislating.”

Recently, however, Ranking Member Thompson has praised Senate Republicans Braun and Boozman for their work on the bill, and has asked for a House hearing to learn more about the benefits of the bill—a good sign for the future of the GCSA.

**Carbon Litigation and Regulation**

**SUPREME COURT ADVANCES MAJOR QUESTIONS DOCTRINE AND LIMITS EPA’S AUTHORITY TO REGULATE POWER PLANT CARBON EMISSIONS**

On 30 June 2022, the U.S. Supreme Court issued a decision in West Virginia v. Environmental Protection Agency, limiting the U.S. Environmental Protection Agency’s (EPA) power to regulate carbon emissions from power plants under Section 111(d) of the Clean Air Act (CAA). More broadly, the Court’s decision places a new set of constraints on EPA (and other federal agency) rulemaking authority and officially announces the arrival of the "major questions doctrine."

The Court’s decision stems from the Obama administration’s adoption of the 2015 Clean Power Plan, and its subsequent repeal and replacement by the Trump administration with the Affordable Clean Energy (ACE) Rule. The U.S. Court of Appeals for the D.C. Circuit vacated the ACE Rule in 2021, and in its decision embraced a broad interpretation of EPA’s regulatory authority embodied in the Clean Power Plan. West Virginia, along with a coalition of states and coal companies,
appealed to the Supreme Court to reverse the D.C. Circuit's decision. With the Supreme Court's latest decision, West Virginia and its coalition have achieved their desired result.

In a 6-3 decision authored by Chief Justice Roberts and joined by Justices Thomas, Alito, Gorsuch, Kavanaugh, and Barrett, the Supreme Court determined that EPA did not have the authority under Section 111(d) of the CAA to regulate the composition of the nation’s energy portfolio, as it had attempted to do through the Clean Power Plan. The Court held that under its "major-questions" precedent, such consequential regulation must be based on clear congressional authorization, a standard that the Clean Power Plan did not meet.

The major questions doctrine, the Court explained, "took hold because it refers to an identifiable body of law that has developed over a series of significant cases all addressing a particular and recurring problem: agencies asserting highly consequential power beyond what Congress could reasonably be understood to have granted." In one of the "significant cases" cited by the Court to explain the emergence of the major questions doctrine, the Court stated that it "expect[s] Congress to speak clearly if it wishes to assign to an agency decisions of vast economic and political significance." In the instant case, the Supreme Court applied the major questions doctrine and held that the text of the CAA § 111(d)—which authorizes EPA to adopt "standards of performance" for existing sources reflecting the "best system of emission reduction" that has been adequately demonstrated—should not be read so broadly that it authorizes EPA to effectively command the reordering of the nation's power sector.

In promulgating the Clean Power Plan, EPA had explained that it would "improve the overall power system by lowering the carbon intensity of power generation," rather than promulgating rules that would improve efficiency at power plants. This view of EPA’s authority, Chief Justice Roberts wrote, "effected a fundamental revision of the statute." He continued, "[w]e also find it highly unlikely that Congress would leave to agency discretion the decision of how much coal-based generation there should be over the coming decades." Instead, "[t]he basic and consequential tradeoffs involved in such a choice are ones that Congress would likely have intended for itself;" and "[t]he last place one would expect to find [such authority] is in the previously little-used backwater of Section 111(d)." Moreover, Chief Justice Roberts noted that the Clean Power Plan essentially adopted a cap-and-trade scheme for carbon, a decision which Congress had consistently rejected. But, while the Court determined that the EPA exceeded its authority by regulating as outlined in the Clean Power Plan, the Court did not prevent the EPA from providing general regulation of CO2 emissions under the CAA.

Given the questionable grant of authority in Section 111(d), the Chief Justice explained that the Supreme Court’s major-questions precedent "counsels skepticism toward EPA’s claim that Section 111 empowers it to devise carbon emissions caps based on a generation shifting approach." To overcome that skepticism, the Government must point to clear congressional authorization to regulate in that manner, which it did not do. In conclusion, Chief Justice Roberts explained: “[I]t is not plausible that Congress gave EPA the authority to adopt on its own such a
regulatory scheme in Section 111(d). A decision of such magnitude and consequence rests with Congress itself, or an agency acting pursuant to a clear delegation from that representative body.”

Notably, the majority decision does not discuss its impact on the continued viability of Chevron deference, the long-standing legal principle that requires courts to defer to agency interpretations of their empowering statutes, so long as those interpretations are reasonable. However, the major questions doctrine can be expected to have an impact on the application of Chevron deference moving forward, allowing for more situations where courts need not defer to agency action.

The reaction on Capitol Hill and from the White House was swift and along party lines. Congressional Republicans applauded the decision. Senate Republican Leader Mitch McConnell said the ruling “limited the power of unelected, unaccountable bureaucrats.” Additionally, Shelly Moore Capito, the top Republican on the Senate Environment and Public Works Committee, called the ruling “welcome news... that further proved that EPA overstepped its authority by imposing enormously burdensome regulations on states to reconfigure our electric grid despite Congress’s rejection.”

Congressional Democrats blasted the ruling. Senate Majority Leader Chuck Schumer said that the ruling “will cause more needless deaths ... that will exacerbate the climate crisis and make our air and water less clean and safe.” Furthermore, House Energy and Commerce Committee Chair Frank Pallone said, “the Clean Air Act is emphatically clear that EPA has both the authority and the obligation to protect public health and regulate dangerous air pollution like greenhouse gases.”

Word from the White House was equally swift and direct with President Biden declaring that the decision “takes our country backwards... damaging our nation’s ability to keep our air clean and combat climate change.” In his 30 June 2022 statement, President Biden stated, “I will take action. My Administration will continue using lawful executive authority, including the EPA’s legally-upheld authorities, to keep our air clean, protect public health, and tackle the climate crisis.” As a result of the ruling, President Biden immediately directed the U.S. Department of Justice to find ways under federal law to address climate change and said he will keep pushing for additional Congressional action.

As a policy matter, the Supreme Court’s decision will play an important role in determining the direction of the Biden administration’s future plans to combat climate change. The decision imposes a significant impediment to future EPA regulation of power sector carbon emissions, at least in the manner that EPA once envisioned. The Biden administration has yet to propose such regulations, and the Supreme Court’s holding will undoubtedly influence the priority and content of future EPA regulatory efforts on this front. The decision will also cause the Biden administration to look more carefully at other avenues, both executive and legislative, for achieving greenhouse gas reductions. Then again, without the 60 votes in the Senate needed to break a filibuster, climate legislation is not a viable option at this time, leaving executive action as the most likely near term path for addressing climate change.

THE COURTS AGAIN ALLOW AGENCIES TO WEIGH CARBON
The Fifth Circuit Reinstates the Social Cost of Carbon

On 16 March 2022, in a unanimous three-panel decision, the U.S. Court of Appeals for the Fifth Circuit stayed an injunction issued by the U.S. District Court for the Western District of Louisiana that had frozen the Biden administration’s Social Cost of Carbon (SCC) measures. As a result of this decision, the Biden administration’s SCC measures are effectively reinstated for federal agencies to continue to assess carbon impacts caused from agency rulemaking and project assessments and evaluations pending a full appeal of the injunction. This decision has sweeping impacts on all federal agencies touching on development approval processes, including the U.S. Environmental Protection Agency, the Department of the Interior, the Department of Energy, the Council on Environmental Quality, and the Department of Transportation, among others.

Context on Federal Carbon Measuring and the Subject Conflict

By way of background, in 2009, the Obama administration developed an Interagency Working Group (IWG) to craft quantifiable estimates of the SCC that all federal agencies would have to apply in their own cost-benefit analysis on the impact of greenhouse gas (GHG) emissions on proposed rulemakings, infrastructure project reviews, and other agency actions. This IWG was removed by the Trump administration but was reinstated by the Biden administration as part of Executive Order 13990, signed on 20 January 2021. Executive Order 13990 also called for agencies to develop new quantifiable estimates for the SCC within 30 days. In the meantime, while they are being developed, federal agencies are to use the estimates that were in place in 2016 as “Interim Estimates.” The Interim Estimates were published in February 2021 and represent the present value of the damage caused from emitting a certain volume of GHGs into the atmosphere.

In April 2021, out of concern that use of the Interim Estimates would increase regulatory burdens, 10 states filed lawsuits against a variety of federal agencies challenging the Biden administration’s alleged broad use of the Interim Estimates developed by the IWG as violating the Administrative Procedure Act. Notably, the lawsuit did not attack any specific regulation or agency action. In February 2022, the U.S. District Court entered a preliminary injunction enjoining the defendant federal agencies from using the Interim Estimates in any manner. The defendants appealed the District Court’s decision and, in the shortterm, moved to stay the injunction pending a decision on the appeal, arguing that the plaintiffs’ states lacked standing, their claims were not ripe, and the Interim Estimates were not a final agency action.10

The Court’s Rationale

The Fifth Circuit found the plaintiffs’ claim of injury to be too tangentially related to the Interim Estimates to hold that the harm was concrete enough to find the plaintiffs had standing. As the Fifth Circuit put it, the plaintiffs’ “claimed injury does not stem from the Interim Estimates themselves, it stems from any forthcoming, speculative, and unknown regulation that may place increased burdens on them and may result from consideration of [SCC].”11 Thus, the Fifth Circuit found that a stay of the injunction would “impose minimal injury on the Plaintiff States,”12 because, by
the time the preliminary injunction was entered, the Interim Estimates had been active for a year and thus were effectively the status quo. By contrast, the Fifth Circuit found that the preliminary injunction would “irreparably harm” the defendant federal agencies by forcing them to stop following the President’s directive on how to make agency decisions before they make those decisions: “All of this effectively stops or delays agencies in considering [SCC] in the manner the current administration has prioritized within the bounds of applicable law.”13 The Fifth Circuit further found that, at a more basic level, the District Court overstepped its authority on this topic: “The preliminary injunction’s directive for the current administration to comply with prior administrations’ policies on regulatory analysis absent a specific agency action to review also appears outside the authority of the federal courts.”14

**What to Expect Moving Forward**

In light of this decision, agency rulemakings, infrastructure project permitting approvals, federal lease transactions, and federal grant funding may proceed normally by applying the Interim Estimates for the SCC that were initially halted upon the issuance of the injunction. This will avoid delays in agency actions that were anticipated to occur by a lack of a SCC framework to apply. If, however, the injunction is affirmed on appeal, then federal agencies may find themselves having to delay agency actions and project approvals to revise their regulatory impact analysis in accordance with the court’s decision.

**USDA TO INVEST US$1 BILLION IN CLIMATE-SMART AGRICULTURE AND FORESTRY**

On 7 February 2022, the U.S. Department of Agriculture (USDA) announced the Partnerships for Climate-Smart Commodities program, which will provide funding opportunities for farmers, ranchers, and forest owners to develop and implement climate-smart projects. The USDA will invest US$1 billion toward Climate-Smart Agriculture and Forestry (CSAF) strategies and systems that reduce agricultural greenhouse gas (GHG) emissions or sequester carbon.

The USDA is targeting pilot projects that:

- Last one to five years.

- Produce and market climate-smart commodities.

- Provide technical and financial assistance to producers who implement climate-smart practices on a voluntary basis on working lands.

- Pilot innovative and cost-effective methods for measurement/quantification, monitoring, reporting, and verification (MMRV) of GHG benefits.

- Focus on farm, ranch, or forest production of climate commodities and MMRV of GHG and sequestration benefits.

- Include specific agricultural and forestry practices, combinations of practices, or practice enhancements that produce climate benefits (such as cover crops,
low or no-till, nutrient management, afforestation or reforestation on working lands, and planting for carbon sequestration).

The USDA’s Community Credit Corporation will issue grants in two funding pools. The first pool is focused on large-scale project proposals, ranging from US$5 million to US$100 million, which emphasize the GHG benefits of climate-smart commodity production and include direct, meaningful benefits to a representative crosssection of production agriculture, including small and historically underserved producers. The projected benefits of GHG mitigation and carbon sequestration will be weighed heavily in the first pool. As extended, the application deadline for the first funding pool was 6 May 2022.

The second funding pool is focused on particularly innovative pilot projects with grants ranging from US$250,000 to US$4,999,999. Proposed projects in the second funding pool should emphasize the enrollment of underserved producers or MMRV activities at minority-serving institutions. Equity and environmental justice initiatives will be weighed heavily in this funding pool. As extended, the application deadline for the second funding pool was 10 June 2022.

Proposals in both pools should include: (a) an executive summary of the pilot project describing the issues the project seeks to address and how it will contribute to those goals; (b) a plan to pilot CSAF practices on a large scale; (c) a plan to demonstrate scalable and low-cost MMRV systems; and (d) a plan to develop and expand markets for climate-smart commodities.

Proposals will be evaluated (at minimum) on the following:

- Benefits associated with the production of the climate-smart commodities, including GHG mitigation and carbon sequestration benefits from ongoing or new practices, on a per-farm, per-project, per-commodity produced, or per-dollar expended basis; the anticipated longevity of such benefits; and non-GHG environmental benefits (such as water quality, soil quality, localized air pollution, or wildlife habitat benefits).

- Market development of CSAF commodities, including scalability, likelihood of long-term viability, ability to inform future USDA actions to encourage climate-smart commodities, and ability to help producers realize greater market returns by overcoming barriers to adopting climate-smart practices, including estimated market returns to participating producers.

- Equity, environmental justice (EJ), and minority-serving institutions (MSI), including economic benefits for underserved producers, the number of underserved producers, partnerships with EJ/MSI/equity/small farmer organizations, and the project’s direct benefit to producers, particularly small and underserved producers.\(^{15}\)

- Project management, including the budget proposal, estimated GHG benefits per dollar invested, innovative collaborations and partnerships, and prior experience.

- Technical proposals, including the completeness, credibility, and innovation in
the MMRV plan, contribution to advancing supply chain tracing and incentive structures, the project’s direct benefit to producers, and approach to reducing transaction costs.

- Diversity of the application, including geographic size, scale, and reach.

A wide range of public and private entities may apply for these grants through grants.gov. The primary applicant must be an entity (rather than an individual), though entities may coordinate and collaborate on proposals. Sole proprietor agricultural producers and landowners are not directly eligible themselves, but they may receive incentives through awarded projects granted to selected entities. Additional information can be found online at the USDA’s Partnerships for Climate-Smart Commodities page.

**Carbon Business**

**CONTINUING CARBON OFFSET OPPORTUNITIES IN AGRICULTURE AND FORESTRY**

Among global industries, agricultural and forestry industries have been leaders in sustainability practice, standards, and accountability. As such, agriculture and forestry are well positioned to leverage myriad opportunities in the carbon management sector. Some of these opportunities include carbon sequestration, carbon banking, and climate-friendly farming and forestry practices. In addition, as market appetite for environmentally responsible investments increases, the agricultural and forestry industries may capitalize on shifting investor demands seeking climate-conscious returns.

Here, we provide an overview of trends in the public and private sectors that continue to grow the opportunities for carbon offsets in the agricultural and timber sectors.

**Regulatory Action on Carbon**

*Federal Efforts*

While federal efforts have been underway since 2020, they have faced significant hurdles to final passage into law.

*Growing Climate Solutions Act*

In June 2020, the U.S. Senate introduced the Growing Climate Solutions Act, which seeks to create a role for the U.S. Department of Agriculture (USDA) in the emerging carbon credit marketplace and to allow owners of agricultural, forestry, and ranch lands to participate in these markets. The bill was reintroduced in April 2021, and in June 2021 the bill passed the Senate. However, the House still has yet to hold a vote on the bill.

For a more detailed analysis of the bill, please see the article on the 2023 Farm Bill and the Growing Climate Solutions Act on page 3 in this issue.
AMAZON21 Act

In November 2021, Rep. Steny Hoyer (D - Maryland) introduced the AMAZON21 Act, which seeks to establish an international carbon sequestration program and provide international technical assistance for carbon market development. The act would require the U.S. Secretary of State to establish an “International Carbon Sequestration Program” to create carbon sequestration projects in developing countries. These projects would be selected based on their potential to protect forests, swamps, and other natural carbon sinks and would be subject to governance and transparency requirements. If chosen to participate, the projects would be eligible for “results-based payments” based on the amounts of carbon sequestered by each project. The act would also create grants for the development of carbon sequestration projects and authorize a program to provide resources and technical assistance to support nature-based carbon sequestration around the world. The act is currently under review in the House Committee on Foreign Affairs.

State Carbon Regulations

In the current absence of federal action, state agencies and municipalities are seeking to manage their carbon footprints through a variety of policies, including low carbon fuels, building practices, energy portfolio standards, and electrification.

EAST COAST

New York

In July 2019, New York enacted the Climate Leadership and Community Protection Act, which sets a goal for the state to reduce statewide greenhouse gas (GHG) emissions by 40% by 2030, and no less than 85% by 2050 from 1990 levels. The law created a statewide Climate Action Council, which recently shared its initial plan for meeting these targets. The council’s plan suggests that the state will focus heavily on carbon sequestration in agriculture as a method to meet the state’s climate goals. This plan includes New York’s Climate Resilient Farming grant program, which has so far awarded US$12 million in project funding, and reduced or sequestered the equivalent of approximately 300,000 metric tons of carbon dioxide. The plan also discusses creation of a New York Forest Carbon Bank from which emitters could purchase emissions reduction credits. The revenue from the Forest Carbon Bank would be used to finance GHG emissions reduction and carbon sequestration activities.

Maryland

In April 2022, the Maryland General Assembly passed the Climate Solutions Now Act, which requires the Maryland Department of the Environment to develop plans for meeting the state’s aggressive climate goals of 60% statewide emissions reductions by 2030, based on 2006 levels, and net-zero statewide GHG emissions by 2045. To achieve these goals, the act requires the Maryland Department of the Environment to provide for the use of offset credits generated by carbon sequestration projects. The act also requires development of guidelines to inform a state strategy for using trees to maximize carbon sequestration.
WEST COAST

Washington

In March 2020, Washington legislators passed, and the governor signed into law, H.B. 2528 recognizing and supporting the efforts by timber companies to reduce carbon emissions through restoration and other management practices. The law went into effect in June 2020, recognizing the forest products industry as a net sequesterer of carbon and setting a state policy of basing forest carbon accounting on international standards. This is a significant step toward integrating forestry into Washington’s emerging carbon economy and establishing a policy foundation for expanding the role of the forest products industry as part of Washington’s global climate response.

In April 2022, the Washington Department of Natural Resources (DNR) launched a carbon sequestration project on state forestlands. The forests will be entered into leases that stipulate their use for storing carbon and generating revenue for state trust land beneficiaries through carbon markets. The DNR is partnering with Finite Carbon, a developer and supplier of forest carbon offsets, to facilitate carbon sequestration efforts. The Commissioner of Public Lands moved 3,750 acres into protection in April, and the project aims to preserve 10,000 acres of forestland for carbon sequestration efforts.

California

In December 2020, the California Senate introduced SB-27, the “Natural and Working Lands” amendment to the 2006 California Global Warming Solutions Act, which seeks to take advantage of the ability of lands to sequester carbon. The bill was signed into law on 23 September 2021.

The amendment is aimed at reducing GHG emissions from “working” and “natural” lands by identifying an overall climate goal for these properties to sequester carbon and reduce GHG emissions, declaring that natural and working lands are a priority for the California legislature and ensuring that such lands are a major component of the state’s climate plan.

This amendment reflects a growing trend within the agricultural and forestry industries toward sustainability as a business practice. With increasing support (and pressure) from state and local governments to reduce carbon emissions, the trend toward sustainable land management practices is likely to continue to grow.

Trends in Carbon Policy in the Private Sector

In the private sector, significant numbers of investors and corporations are highly climate conscious. For instance, institutional investors and advisors are revising their environmental, social, and governance (ESG) policies to align with the market preference for carbon-neutral policies, and many of the world’s largest investment managers are incorporating carbon-specific policies into their sustainability standards. Corporations are also investing heavily in renewable energy, as well as carbon reduction efforts, including participation in the carbon credit marketplace. This investment offers timber and agricultural landowners an emerging market to
leverage their landholdings and monetize them in new and different ways.

Entities ranging from the 2021 Tokyo Winter Olympics, NASCAR, the ESPY Awards, Stanford University, Disney, Microsoft, and Chevrolet have participated in voluntary carbon markets to offset their carbon footprint. The mechanics of these markets are described below, as well as some examples of companies that are working to leverage the emerging carbon credit marketplace to meet their sustainability goals.

Carbon Credit Markets

Carbon credit markets are market-based means of incentivizing reduction in carbon emissions. There are two broad categories of carbon credit markets: compliance and voluntary. Compliance markets stem from governmentally imposed limits on carbon emissions. For example, in California’s Cap and Trade Program, the state of California auctions “authorizations” to emit carbon. Market participants can then buy and sell authorizations with each other. Emitters can also purchase a limited number of carbon “offsets” from landowners, farmers, and other firms that have altered their practices in such a way that their carbon emissions are reduced. Emitters pay for the privilege of generating GHG, and landowners are paid to implement practices that reduce carbon emissions. In theory, these dual incentives lead to lower carbon emissions across the board.

On the other hand, voluntary carbon credit markets are not imposed by a government authority. Rather, buyers in voluntary markets seek to offset carbon consumption for altruistic or market reasons. Similar to compliance markets, an “offset” or credit is created when a landowner alters its practices in a way that reduces its carbon footprint.

However, as mentioned above, the carbon credit market is still largely unregulated. In the absence of federal guidance to date, many industry participants have developed additional strategies to create and exchange carbon credits.

Industry Examples

Some private consultants have attempted to fill the regulatory gap by assisting producers in their implementation of conservation practices, as well as facilitating the purchase and sale of carbon credits. IndigoAg, for example, has created a system to help encourage and cultivate regenerative farming practices. Their carbon sequestration program outlines regenerative farming practices that lock carbon in the soil and then rewards those farmers for successful implementation of those practices. To catalyze the program, IndigoAg created a carbon marketplace where growers are paid for every metric ton of carbon dioxide sequestered. Through these initiatives, IndigoAg created a global program for carbon trading that serves as a voluntary market. Notably, IndigoAg has stated its intent to transition its credits to be eligible for trading in compliance and regulatory markets.

Another unique partnership involves Weyerhaeuser, one of the largest private holders of timberlands in the world, and Oxy Low Carbon Ventures (OLCV). In a recently announced lease agreement, OLCV will be leasing the porous land under Weyerhaeuser’s timber holdings for carbon sequestration.
CONCLUSION

The agricultural and forestry industries are already capitalizing on carbon management policies and ESG-based investments. Federal and state regulatory programs continue to evolve; getting involved with these laws and policies ahead of the curve presents opportunities for agricultural and forestry interests to ensure that carbon-centric sustainability measures and regulations are suitable to industry practice and growth. Innovators within ranching, agriculture, and forestry, as well as companies that invest in these sectors, are in a prime position to capitalize on the economic and ecological opportunities in carbon management.

Carbon Spotlight

WEYERHAEUSER’S CLIMATE CHANGE SOLUTIONS

Weyerhaeuser, one of the world’s largest owners of private timberlands, has been a long-time leader in sustainability efforts. From managing vast tracts of timber that naturally sequester CO2, to efficiently managing supply chain logistics, the company has over 120 years of experience in sustainability practices.

Recent commitments have supercharged Weyerhaeuser’s investment in sustainability. As part of a new sustainability strategy launched in 2020, the company established three positive impact areas—its 3 by 30 sustainability ambitions—where it plans to make significant progress by 2030. One of these ambitions focuses specifically on contributing to climate change solutions, including ambitious plans to grow the company’s Natural Climate Solutions business through carbon capture and storage (CCS), forest carbon offsets, renewable energy development, and mitigation solutions and conservation. The company has identified multiple locations for potential CCS projects across a portion of its 7 million-acre footprint in the U.S. South.

In line with those commitments, this spring, Weyerhaeuser and Occidental’s Oxy Low Carbon Ventures (OLCV) announced their first agreement for the evaluation and potential development of a CCS project in Louisiana. Weyerhaeuser will work with OLCV to develop and operate a carbon sequestration hub on more than 30,000 acres of subsurface pore space under Weyerhaeuser timberlands. While Weyerhaeuser will continue to manage the acreage as a working forest, OLCV will use the underground geologic space to permanently sequester industrial carbon dioxide.

The lease agreement with OLCV marks Weyerhaeuser’s first step in building its CCS business across its land base in the Gulf South. Weyerhaeuser launched this first-of-its-kind relationship with OLCV, thanks to OLCV’s own reputation in leading efforts for carbon management and sequestration. Both companies understood that entering into this unique leasing arrangement would require a deep understanding of the sustainability and business objectives of the other.

Even with that mutual consideration, inking the deal required patient cooperation and communication throughout. “The agreement presented a number of unique challenges because it was such a new concept for us,” said Ali Seals, senior legal counsel for Weyerhaeuser. “We needed to ensure that it worked for both parties, and
even though our ultimate common goal is carbon mitigation, our distinct roles as landowner and operator required really understanding our own needs as well as the other’s to get it right.” Both companies needed to understand the unique requirements and pain points of one another with respect to safety, deal mechanics, and a host of other issues that required (and continue to require) careful and strategic thinking from all parties.

Additionally, both parties faced a nascent and fluctuating regulatory regime governing carbon mitigation and sequestration. As detailed in other sections of this edition, the regulatory landscape is ever changing, from federal to state and local laws. Further, the voluntary carbon market requires the ability to pivot to respond to a changing market, new technical considerations, or new regulations. Before negotiations even began, both companies required a deep understanding of how various environmental and carbon regulations were moving through the Louisiana state legislature, as well as what is on the federal horizon. As noted by Ali Seals, “We needed to consider so many unknowns, such as changing politics, how the tax credits might play out, how to value the asset, and how the project might look at the end of its lifetime, all in a very fluid environment.” As evidenced by the successful outcome, both Weyerhaeuser and OLCV were able to negotiate the unknowns and mitigate the risks, culminating in an agreement that will pave the way for other similar projects.

Fueled by a tremendous amount of work and creativity from everyone involved, this forward-thinking partnership between an international energy company and one of the world’s largest timberlands owners represents the potential for meaningful collaboration in managing carbon at levels that can achieve a significant impact in addressing climate change.

Alyssa Moir, Melissa Malstrom, Laurie Purpuro, and Brianna Marshall also contributed to this article.

**FOOTNOTES**

1 Slip op. at 20 (citations omitted).


3 Slip op. at 23 (quoting 80 Fed. Reg. 64784)

4 Id. at 24.

5 Id. at 25.

6 Id. at 26.

7 Id. at 28.

8 Id. at 31.
Note that this is weighted more heavily in the second pool of funding.

Forestry and agriculture nonprofits are actively working to develop sustainable and carbon-friendly practices for each industry. For instance, the Sustainable Forestry Initiative is working to create certification standards for sustainable forestry, and Leading Harvest is likewise developing sustainable farmland practices in the agricultural sector. See Sustainable Forestry Initiative, Standards, here; Leading Harvest, About the Leading Harvest Farmland Management Standard, here.


See CAL. CODE REGS. tit. 17, Ch. 1, Art. 5, California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms.

For example, companies like TerraPass (terrapass.com) and CoolEffect (cooleffect.org) sell carbon offsets at retail to allow individuals and companies to offset carbon emissions from travel or other carbon emitting practices. Airlines are increasingly offering carbon offsets to customers as a way of mitigating the carbon impact of air travel. See, e.g., jetBlue, Soaring Toward a Carbon-neutral Future, here; United Airlines, CarbonChoice Carbon Offset Program, here.