



Harvard Model Congress Boston 2024

Natural Climate Solutions and Biological Carbon Offsets Update

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As natural climate solutions (NCS) and biological carbon offsets are emerging areas in science and policy, attitudes and approaches towards them continue to rapidly change. Since the completion of the briefing, congress, executive branch agencies, and international agencies created new policies to research, regulate, and enable natural climate solutions and biological carbon offsets. Further, the current presidential candidates differ significantly in their perspectives on natural climate solutions and biological carbon offsets, meaning that the next presidential election will significantly determine the American approach towards the climate crisis.

Members of Congress introduced a variety of new bills encouraging investment and research in natural climate solutions and/or biological climate offsets. Representatives James Baid (R-IN) and Zoe Lofgren (D-CA), both members of the House Committee on Science, Space, and Technology, introduced the bipartisan Carbon Sequestration Collaboration Act on July 24, 2023. It requires the Secretary of Energy to carry out “terrestrial carbon sequestration research and development activities” (“H.R. 4824 – 118th Congress: Carbon Sequestration Collaboration Act”, 2023). Terrestrial Carbon sequestration refers to the “process of capturing and storing carbon dioxide in vegetation and soil within a few feet of the Earth’s surface” (“Terrestrial Sequestration”, 2023). This bill has been reported by committee and was sent to the full house of representatives. Congress members introduced several other bipartisan bills including S 1576, which tackles natural carbon removal, HR 4163, which looks to create offsets through changing tillage strategies, and S 3500, which provides research grants for natural climate solutions. None of these bills have made it past committee.

In response to President Biden’s 2022 Executive Order 14072, various executive-branch agencies have introduced new steps to further natural climate solutions.

On December 11, 2023, the Interior Department announced new measures to promote nature-based solutions in tackling the climate crisis. Particularly, the department, in collaboration with Duke University’s Nicholas Institute for Energy, Environment, and

Sustainability, released its online tool the “Nature-based Solutions Roadmap.” The roadmap provides “implementation strategies, project planning resources, and successful example projects.” The Department also adopted a new policy providing land managers and other decision makers more guidance on natural climate solutions (“Interior Department Announces New Actions in Support of Nature-Based Solutions”, 2023).

Additionally, the order prompted the USDA to propose amending all 128 forest land management plans to be more conducive to the preservation of old-growth forests, important sources of carbon sequestration. According to White House Council on Environmental Quality Chair Brenda Mallory, the United States’ national forests sequester over 10% of the country’s annual carbon emissions, representing a significant opportunity for natural carbon offsets. The proposed amendments would revitalize the standards of conservation for the United States’ old-growth and mature forests, incorporating more scientific research and Indigenous Knowledge into the USDA’s processes and regulations. The Department has also released the “Climate Risk Viewer,” a tool used to assess climate risks and vulnerabilities (“First-of-its-Kind National Forest Plan,” 2023).

However, the House Committee on Natural Resources, led by Chair Bruce Westerman (R-Ark.), has condemned the amendments, stating that the conservation measures in the amendments strip the USDA’s ability to pursue active management techniques to stop wildfires. This, he posits, is the opposite of what the forests need during this historic wildfire crisis (“Biden Administration Loses the Forest for the Trees,” 2023).

The USDA also released its first deliverable under the Growing Climate Solutions Act, a report titled “A General Assessment of the Role of Agriculture and Forestry in the U.S. Carbon Markets” The report delineates the ability of farmers, ranchers, and forest landowners to earn carbon credits by switching to more sustainable practices. By employing agricultural strategies that sequester carbon on their land, workers in the agricultural sector can now be compensated for their sustainability through carbon credits, which they can then sell to corporations on the carbon market. In this way, larger, more carbon-dependent companies can still meet their short-term sustainability goals through this support, and smaller family farms can still compete in a rapidly changing market (“USDA Releases Assessment,” 2023).

The Paris Agreement, drafted at the 2015 UN Climate Conference, laid out a long-term plan to lower global carbon emissions. From November 30, to December 13, Dubai hosted the 2023 United Nations Climate Change Conferences, more commonly known as COP 28. At COP 28, many countries wished to adopt additional agreements laid out under article six of the Paris agreement, which defined potential rules for carbon trading (Lujan, 2023). However, countries failed to reach a consensus on articles 6.2 and 6.4 (Gupte and Ghosh, 2023). Article 6.2 defines the accounting framework for international emissions trading (Lujan, 2023). Countries failed to fully adopt article 6.2, although its framework will be used as partial adoption was achieved at COP 26 in Glasgow. 6.4 provides the ability for companies located in one country to reduce emissions and then sell carbon credits to a company located in another country. Countries failed to reach a consensus on article 6.4 as many wished for stricter rules regarding carbon removals to better guarantee the integrity of the carbon credits. The failure to adopt article 6.4 will set back global carbon credit markets, which were already faltering due to recent questions about the credibility of certain carbon offsets (Gupte and Ghosh, 2023).

The Presidential Candidates differ significantly in their position on natural climate solutions and biological carbon offsets. As previously explored, President Biden supports these measures. In the Republican primary, Donald Trump, Vivek Ramaswamy, and Ron DeSantis remain climate skeptics and lack a strong platform to address climate change, whereas Chris Christie and Nikki Haley urge moderate climate action (Jacobo, 2023). Christie's positions on natural climate solutions and biological carbon offsets are unclear. Haley strongly supports carbon capture measures as a method of fighting climate change, including nature-based solutions ("Where Nikki Haley Stands on Climate Change", 2023). Outside of the Republican primary, independent candidate Robert F. Kennedy Jr. supports strong climate action. He wishes to preserve lands by limiting logging, drilling, and mining. Further, he hopes to take measure to contain suburban sprawl (Jacobo, 2023).

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