

Agriculture and Forestry—Partnering in the Fight Against Climate Change



New York’s agricultural emissions represented approximately 6% of statewide greenhouse gas emissions in 2019, largely from livestock farming and soil management practices. However, the agriculture and forestry sectors can make further reductions in emissions, primarily methane and nitrous oxide and deliver many benefits as well such as carbon capture (or sequestration) through growing trees and other plants, and in soils. In 2019, carbon sequestration in forestlands and urban forests and long-term storage of carbon in harvested wood products provided approximately 96% of New York State’s greenhouse gas emissions removals—mitigating 11% of statewide emissions. Maximizing the carbon sequestration and storage potential in the agriculture and forestry sectors is a key strategy for achieving net-zero emissions economywide by 2050. These sectors are poised to provide significant contributions as we continue to implement the nation-leading Climate Act.

Clearing the Path for Carbon Neutrality

The Scoping Plan outlines several strategies to help the agriculture and forestry sectors achieve the State’s emissions reduction goals.

- **Promoting sustainable forest management** enhances tree health, downstream water quality, wildlife habitats, recreation opportunities, and eco-friendly wood products. This strategy calls for the development of guidance and programs to promote forest management that maximizes carbon storage and sequestration, climate resilience, and other climate-related issues, recognizing that almost 75% of forest land is privately owned, with the majority of landowners owning small parcels.
- **Protecting forests and farmland** avoids converting these lands to other uses, thus maintaining and protecting their carbon sequestration and storage potential. Agricultural and forested lands provide many environmental benefits, including capturing carbon in the land base, preventing future emissions from vehicle use by preventing sprawl development, enhancing rural viability and wildlife habitats, providing storm and flood mitigation, supporting air and water quality. This strategy requires continued support from public policy and funding for land acquisition, conservation easements, and tax incentives; outreach to landowners for interest in selling lands or conservation easement opportunities; coordination with municipalities on zoning and planning goals; understanding of the opportunities for land access and intergenerational land transfer; and more.
- **Enhancing afforestation and reforestation efforts:** New York State is currently 63% forested and has more forestland than any other state in the Northeast. Still, opportunities remain for additional afforestation and reforestation efforts to further carbon sequestration, carbon storage, and all the other benefits that forests provide, especially in areas lacking sufficient natural forest regeneration. The Scoping Plan strategies propose an increase in tree planting and efforts to encourage natural regeneration of trees.
- **Advancing livestock management strategies** can contribute to deep reductions in agricultural emissions by mitigating methane emissions. The Scoping Plan calls for enhancing programs and outreach efforts to help farmers better manage manure to prevent nutrient loss and emissions. Additionally, precision feed, forage, and herd management strategies will increase training and support to the farm community, expand the use of monitoring and decision tools, and continue research and development of feed supplements and additives for further methane reductions.





- **Improving soil health, nutrient management, and agroforestry:** Scoping Plan strategies to improve soil health and nutrient management primarily focus on nitrous oxide reduction and increasing carbon sequestration. Additionally, agroforestry recommendations that intentionally add trees to areas of agricultural production have the potential to elevate local food production and resiliency; improve water and air quality; provide storm and flood mitigation; improve drought resiliency; provide habitat, scenic vistas, and agritourism; and increase economic development and local jobs.
- **Promoting a climate-focused bioeconomy** will create jobs and strengthen communities while focusing on environmental protection. Strategies include developing forestry training programs; expanding markets for sustainably harvested wood products; developing a sustainable biomass feedstock action plan; increasing market access and providing financial and technical assistance for New York's low-carbon products; advancing bio-based products research; and deploying net negative carbon dioxide removal.

Strategies in Action

New York has 18.6 million acres of forests and 6.9 million acres of agricultural lands in production. Over the last decade, farmers and foresters in New York have continued their efforts and investments to advance environmental sustainability and efficiency, thereby reducing greenhouse gasses, sequestering carbon, and increasing climate resiliency. The Climate Act's goals will further enhance and support the many environmentally friendly actions that these sectors have accomplished, including:

- New York dairy farmers made significant strides in reducing the carbon footprint per hundred weight of milk through greater efficiencies in precision feed management, reducing enteric emissions from cow digestion.
- The New York State Methane Reduction Plan (May 2017) identified and set targets for reducing methane emissions from the agricultural sector.
- A suite of technical assistance and planning resources, developed through the Agricultural Environmental Management (AEM) framework, guide farmers on farm and forest greenhouse gas emission mitigation opportunities.
- New York's Climate Resilient Farming grant program, which demonstrates how climate-responsive efforts can be integrated alongside existing environmental and water quality agricultural programming, has awarded over \$20 million in project funding, resulting in an estimated 370,000 metric tons of CO₂e reduced/sequestered.
- Thousands of landowners have been assisted with forest management on more than two million acres of private lands through programs like the Forest Stewardship Program, Environmental Quality Incentives Program, the 480-a Forest Tax Law program, Partnerships for Regional Invasive Species Management, Forest Health rapid response programs, and the Forest Health Diagnostic Lab.
- The Forest Stewardship Council® and Sustainable Forestry Initiative® has provided Green certification on 800,000 acres of state forests.



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