

USDA BUILDING BLOCKS FOR CLIMATE SMART AGRICULTURE AND FORESTRY



Background

- U.S. International Commitment – 26-28% reduction in GHG emissions below 2005 levels by 2025
- USDA is well-positioned to contribute
 - One of the only departments that can both reduce GHG emissions and store carbon
 - Goal dovetails with much of the work that agencies are already doing (e.g., Soil Health Initiative, forest restoration, climate change adaptation)
- Secretary's announcement – April 23 at Michigan State
 - Outlined the building blocks
 - Established a goal of reducing emissions by 120 MMTCO₂e per year by 2025
 - Announced early actions by industry and nonprofit partners

Principles of the USDA Building Blocks

- **Voluntary and incentive-based** – Building on existing legislation and our history of “cooperative conservation.”
- **Focused on multiple economic and environmental benefits** – Through efficiency improvements, improved yields, or reduced risks.
- **Meet the needs of producers** – By focusing on working farms, ranches, forests, and production systems.
- **Assess progress and measure success** – Through quantitative goals and objectives.
- **Cooperative and focused on building partnerships** – With industry, farm groups, and conservation organizations.

Process

Identified 10 Building Blocks

Soil Health

Nitrogen Stewardship

Livestock Partnerships

Conservation of Sensitive Lands

Grazing and Pasture Lands

Private Forest Growth and Retention

Stewardship of Federal Forests

Promotion of Wood Products

Urban Forests

Energy Generation and Efficiency

Preliminary Data Collection and Proposals

- Relevant programs and authorities
- Technologies and practices
- Metrics for quantifying benefits
- Ancillary benefits
- 2-year work plan
- Barriers, constraints, and tradeoffs

Building Block Goals

Building Block	Goals
Soil Health	Increase no-till from 67 M acres to 100-200 M acres
Nitrogen Stewardship	Through 4 “R’s” reduce nitrous oxide emissions by 10%
Livestock Partnerships	Install 500 anaerobic digesters; install impermeable covers on 10% of dairy cattle and swine operations
Conservation of Sensitive Lands	Enroll 400,000 acres of CRP with high GHG benefits; protect 40,000 acres through easements; transfer expiring CRP acres to permanent easements
Grazing and Pasture Lands	Establish grazing management plans on an additional 4 M acres, for a total of 20 M acres
Private Forest Growth and Retention	Through FLP and CFP, protect almost 1 M acres of working landscapes. Through FSP, establish management plans on 2.1 M acres of forest annually.
Stewardship of Federal Forests	Reforest 5,000 additional acres (above baseline)
Promotion of Wood Products	Increase the number of building projects supported through technical assistance from 280 in 2014 to 2,000 in 2025
Urban Forests	Plant 90,000 additional trees in urban areas
Energy Generation and Efficiency	Promote renewable energy technologies and improve energy efficiency through EECLP, REAP, and NOFEI (EQIP)

Partnerships

- Field to Market – Update farm-level sustainability metrics and enroll 50 M acres in Field to Market program
- The Fertilizer Institute – Provide up to \$6 M to improve nutrient stewardship
- The Nature Conservancy – Enroll 2,000 acres to reforest marginal cropland in the Lower Mississippi Valley
- Equilibrium Capital Group – Accelerate the development and growth of bio-digesters and bio-gas facilities
- Walmart, United Suppliers, and EDF – Enroll 10 M acres in US's SUSTAIN program to improve nutrient management

Partnerships (cont.)

- The Arbor Day Foundation – Work with 19 partners in 17 states and DC to plant 40,000 trees in urban areas
- Green Diamond Resource Company and Forest Policy Forum – Implement a set of principles to ensure forest sector can help mitigate climate change
- American Forest Foundation – New partnership with USFS to engage woodland owners in wildfire mitigation
- Trust for Public Land and Forest Climate Working Group – Implement a toolkit that helps forestland owners estimate the carbon benefit of their practices and provides models of policies that can improve forest carbon
- Lyme Timber Company – List 46,500 acres of FL timberland with the California Air Resources Board

Next Steps – Implementation Plans

- Include information from preliminary proposals and identify:
 - Regional differences in practices and technologies
 - Policy and guidance needed
 - Estimated costs
 - Opportunities for coordination with the Climate Hubs, industry, and non-profit partners
 - Metrics and performance indicators



Next Steps – Metrics

- Two purposes
 - Do a better job of what we are already doing
 - Track progress toward the goals that are laid out here
- Two parts
 - Practice and technology data
 - Greenhouse gas calculations
- Tracking both direct impacts of USDA actions and indirect effects of practice and technology diffusion

