

PARTNERSHIPS FOR **CLIMATE-SMART COMMODITIES**

DELIVERING CLIMATE SOLUTIONS

There is a strong and growing interest among American consumers for climate-smart products.

USDA has invested \$3.03 billion dollars in 135 pilot projects nationwide to connect customers to farmers, ranchers, and private landowners implementing climatesmart production practices on working lands to build soil health, sequester carbon & enhance productivity.

By providing producers with the tools they need to combat the challenges of climate change and building market opportunities for the resulting commodities, USDA is positioning American agriculture as a global leader in delivering voluntary, incentives-driven, marketbased climate solutions.

This report provides an overview of Partnerships for Climate-Smart Commodities' progress.



CLIMATE-SMART MARKETS FOR PRODUCERS

+14,000 ENROLLED FARMS

Connects producers to climate-smart markets, premiums, and incentives, helping them build more economically & environmentally resilient operations.

CLIMATE-SMART PRACTICES



+3,200,000 ACRES OF ENROLLED WORKING LAND

Provides financial and technical assistance specifically for climate-smart practices that reduce greenhouse gas emissions and sequester carbon.



COMPREHENSIVE DATA COLLECTION

+400,000 METRIC TONS OF CARBON SEQUESTERED TO DATE

Climate and environmental benefits associated with climate-smart practices progressively build over time, with +60 million metric tons of carbon estimated to be captured. Final numbers calculated at project completion (~5 years).

PARTNERS

DIVERSITY FOSTERS INNOVATION

NON-PROFIT & COMMODITY GROUPS - 276

FOR-PROFIT ORGANIZATIONS - 257

COLLEGES & UNIVERSITIES - 98

STATE, LOCAL & TRIBAL - 77

CRITERIA

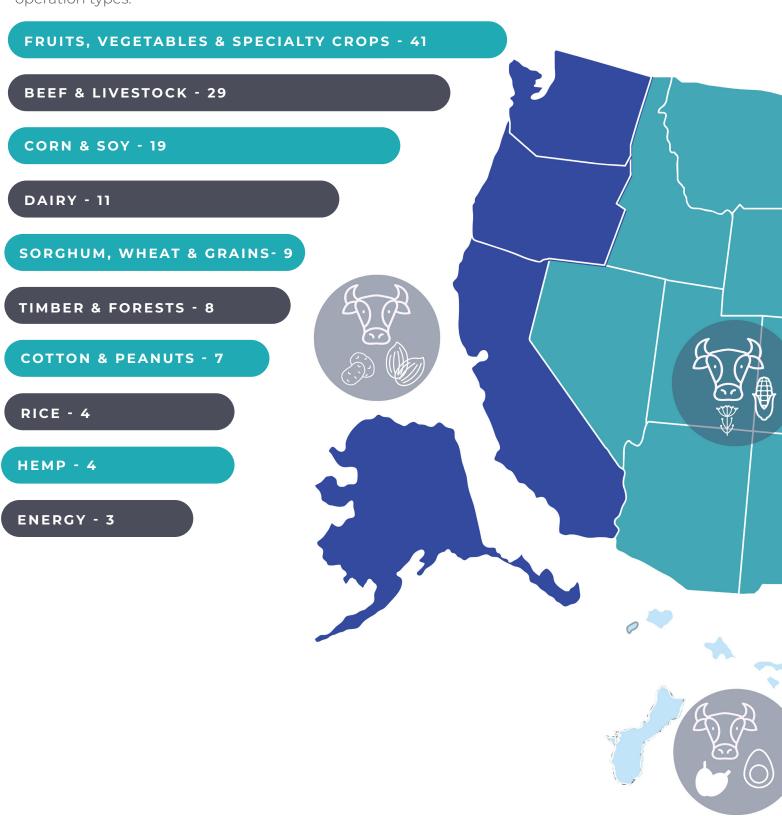
Projects were selected based on:

- · Benefits associated with producing climate-smart commodity
- · Climate-smart market development
- Equity

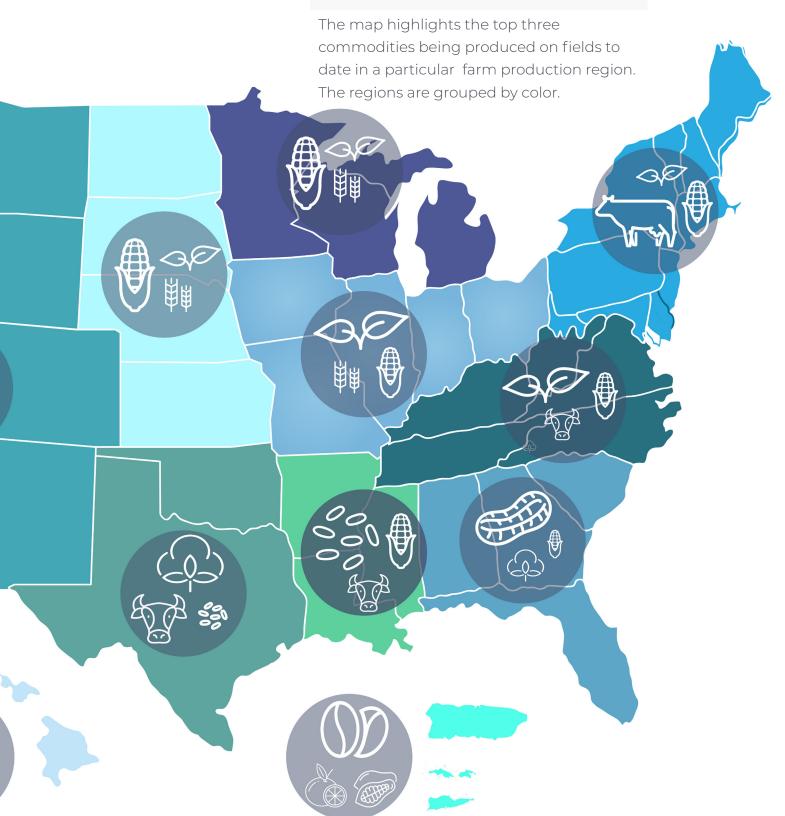
CLIMATE-SMART COMMODITIES

NUMBER OF PROJECTS BY CLIMATE-SMART **COMMODITY GROUP**

The table below shows the number of approved projects by major commodity group. Over 102 major commodities are covered - providing enrollment opportunities for a diverse range of operation types.



WHERE CLIMATE-SMART COMMODITIES ARE BEING PRODUCED



WHAT'S HAPPENING ON THE GROUND

VOLUNTARY CLIMATE-SMART PRACTICES

By empowering producers with voluntary, incentive-based, market-driven approaches, we can deliver climate solutions that benefit us all. The USDA is committed to supporting a diverse range of producers and operation types through a comprehensive suite of climate-smart production practices.

The below word cloud showcases the diversity of the climate-smart production practices being implemented, with larger text representing higher farm enrollment.

ALLEY CROPPING

SOIL CARBON AMENDMENT

MULCHING VEGETATIVE BARRIFR

FOREST STAND IMPROVEMENT

NO TILLAGE

NUTRIENT MANAGEMENT

FFNCF

MICROIRRIGATION

COVER CROP

PRESCRIBED GRAZING

PASTURE & HAY PLANTING

COMBUSTION SYSTEM IMPROVEMENT

BRUSH MANAGEMENT

CONSERVATION CROP ROTATION

CONSERVATION COVER

SILVOPASTURE

WASTE SEPARATION FACILITY

COMPOSTING

REDUCED TILLAGE

FEED MANAGEMENT

PRODUCER ASSISTANCE & OUTREACH

USDA's partners are working to ensure producers have financial and technical assistance to implement climate-smart practices for maximum operational profits and environmental sustainability. Projects use multiple methods to provide assistance so percentages exceed 100%.

TYPES OF

FINANCIAL ASSISTANCE

INPUTS & SUPPLIES - 14%

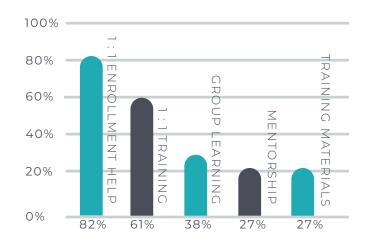
PREMIUM - 2%

TYPES OF PRODUCER OUTRFACH

EXISTING NETWORKS - 72%

PEER REFERRALS - 40%

TYPES OF TECHNICAL ASSISTANCE MOST PRIORITIZED

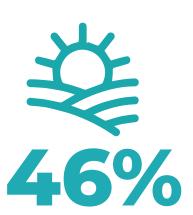


WHO IS PARTICIPATING & WHY?

America's producers are currently confronting the challenges of climate change. This opportunity allows them to diversify their operations' income streams and build climate resiliency into their working lands.



(\$) +**70**%



SMALL & UNDERSERVED PRODUCERS

OF PRODUCERS MOTIVATED TO PARTICIPATE TO BUILD REVENUE PRODUCERS WITH PRIOR CLIMATE-SMART PRACTICE EXPERIENCE ON A FARM

MEASURE, MONITOR, REPORT, VERIFY

USDA's partners are innovating new approaches to accurately capture the greenhouse gas benefits associated with specific climate-smart agriculture and forestry practices. The completeness and credibility of these methods enhance traceability and boost customer confidence in the end product.

MOST COMMON MODELS 126 PROJECTS USING COMET-PLANNER 53 PROJECTS ALSO USING COMET-FARM OTHER MODELS USED BY MULTIPLE PROJECTS EMPIRICAL MODELS GREET PROCESS-BASED COOL FARM MODELS 001APSIM EPIC/APEX 4 COMET-ENERGY DAYCENT-CR 3 SNAPGRAZE DSSAT DNDC RUSLE/STIR 10 *38 additional models were used by 1 -2 projects

DIRECT MEASUREMENT METHODS SOIL SAMPLING- 106 REMOTE SENSING - 38 SOIL CHAMBERS - 33 SOIL SPECTROMETRY - 28 FLUX TOWERS - 14 FIXED SENSORS - 6 PORTABLE FLUX ANALYZERS - 6 MOVEABLE MEASUREMENT UNIT - 6 PORTABLE ANALYZERS - 3

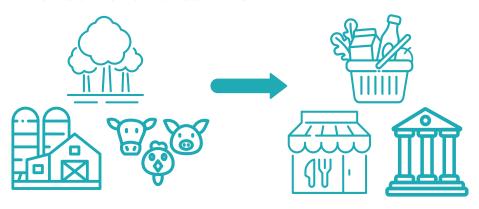


INTO THE HANDS OF CUSTOMERS

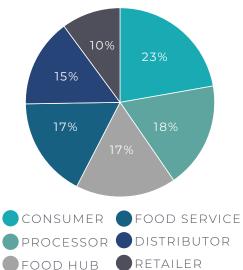
DEVELOPING MARKETS

As consumers increasingly voice a desire for more sustainable, climate-smart products, the USDA and its partners hope to apply the best science to create transparency and traceability in the supply chain, with over 30 verification and certification standards being explored. Collectively, these measures will enhance end customer confidence while helping producers monetize greenhouse gas reduction on their acres by connecting them to new and expanding markets.

PRODUCERS TO CONSUMERS



CLIMATE-SMART COMMODITY BUYERS



CLIMATE-SMART COMMODITIES BEING SOLD AS OF JUNE 2024

- · BARLEY
- · BFFF COWS
- · BEETS
- · BROCCOLL
- · BROCCOLINI
- · CABBAGE
- · CAMFLINA
- · CARROTS
- · CAULIFLOWER
- · CFLFRY
- · CHICKENS (BROILERS)
- · COFFEE

- · CORN
- · COTTON
- · CUCUMBERS
- · EGGPLANT
- · EGGS
- · FLOWERS
- · GREENS
- · GUAYULE
- · HEMP
- · HERBS
- · INDUSTRIAL HEMP
- · JERUSALEM **ARTICHOKES**

- · LETTUCE
- · MILK
- NURSERY
- · ONIONS
- · ORANGES
- · PFAS
- · POTATOES
- · RADISHES
- · RICE
- · RYF
- · SCALLIONS
- · SHEEP

- · SORGHUM
- · SOUASH
- · STRAWBERRIES
- · SWINE
- · TOMATOES
- · TREES/TIMBER
- · TURNIPS
- · WHFAT