CLIMATE POLICY

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Extreme weather variability significantly affects farmers, agricultural supply chains and the food supply. Corn farmers have continuously pushed the boundaries of innovation by investing in practices aimed at improving productivity and adopting practices on their farms that conserve soil and organic matter, all of which reduce or mitigate greenhouse gas emissions.

NCGA Supports

Market-Based Solutions

- Market-based, voluntary opportunities for farmers to provide carbon reduction benefits and opportunities to contribute based on carbon offsets and carbon sequestration through crop production.
- Full transparency among market-based programs that broker the trade of farm-derived ecosystem credits or that outright utilize such credits for their own purposes. Such efforts need to disclose how farmer data is used and shared as well as the methods for validating and quantifying assets and how asset value is determined.
- Policy that provides farmers and bioproduct producers market-derived incentives for focusing on carbon sequestration and becoming carbon neutral or carbon positive.

Reduced Barriers and New Opportunities

- Improved collaborations across state and federal policies, to create better opportunities to share innovative technology and best practices and across geographies, in order to scale solutions.
- USDA as the lead role on federal policies and programs involving agriculture and climate change related efforts.
- Policies that recognize and support early adopters of practices.
- Climate legislation that allows farmers the ability to use the most effective and appropriate production practices to meet the needs of their operations.
- Federal infrastructure initiatives to make all aspects of the agricultural supply change more resilient in the face of extreme weather, and in general more efficient with greater capacity.

Existing Programs

- Federal crop insurance programs that are well-funded and managed so as to effectively and affordably help farmers deal with the financial risks associated with extreme weather events.
- Federal and state conservation technical and financial assistance programs that can help farmers adopt and maintain the use of conservation practices, recognizing that often farmers do this on their own when provided practical and science-based guidance.

Science-Based Research and Goals

- Climate policy that supports research and innovation needed to develop new technologies that will help farmers respond to climate change and continue reducing greenhouse gas emissions. Policies must also support, or not restrict, access to innovative products, including transgenic seeds and pesticides, which are important for enabling agriculture to be part of the solution for global climate change.
- Greenhouse gas reduction goals and targets that are science-based, measurable, and achievable over time.
- Policy to help USDA expand research into measuring the economics and long-term benefits of conservation practices, including the role they can play in enhancing a farm's adaptive capacity to extreme weather events.

Corn Production and the Environment

- Significant improvements in sustainability and productivity have already taken place in corn production. Farmers are now producing more corn, using less land and fewer inputs.
    - The average corn yield in 1980 was just 91 bushels per acre. In 2007, corn yields averaged 150.7 bushels per acre, and the 2018 average was 176.4 bushels.
- In 1980, corn growers produced 6.64 billion bushels of corn and used 3.2 pounds of primary nutrients (nitrogen, phosphorous, and potassium) per bushel. By 2014, farmers more than doubled their production while cutting nutrient use in half, producing 14.2 billion bushels using 1.38 pounds of nutrients per bushel.
- Between 1980 and 2011, soil erosion was reduced by 67 percent per bushel of corn produced and by 43 percent per acre of corn planted.
- Corn producers reduced excess sediment lost to waterways from farmland by 147 tons per year in 2011 relative to 1980. Phosphorous loss from farmland often is related to sediment losses, and corn growers' erosion reduction accomplishments translate into less phosphorus runoff.

Renewable Fuels

- The Renewable Fuel Standard (RFS) provides low carbon biofuels access into the closed transportation fuel market. The RFS is the only federal statutory greenhouse gas (GHG) reduction requirement.
    - Since 2007, the RFS has resulted in cumulative carbon reduction savings of more than 600 million metric tons due to greater than expected carbon savings from conventional ethanol and despite lower than expected production of next generation fuels.
- Ethanol's carbon footprint is shrinking.
    - 2018 USDA analysis shows today's ethanol reduces GHG emissions by 39 to 43 percent, with potential to improve to 70 percent fewer GHG emissions than gasoline.
    - The Department of Energy Argonne National Laboratory GREET model shows ethanol's average carbon intensity is 41 percent lower than that of baseline gasoline today.
- NCGA supports the Next Generation Fuels Act, legislation to establish a low carbon octane standard. This bill would reduce GHG emissions, improve fuel efficiency, improve air quality and further diversity the fuel supply.
    - Requiring that sources used to increase gasoline's octane rating result in at least 30 percent fewer GHG emissions than unblended gasoline would reduce GHG emissions by at least 11 percent with higher ethanol blending compared to today's standard 10 percent ethanol blend.

Soil Health Partnership

- The Soil Health Partnership (SHP), NCGA's flagship sustainability program, is a farmer-led initiative that fosters transformation in agriculture through improved soil health, benefiting both farmer profitability and the environment.
- SHP uses science and data to work alongside farmers in adopting practical agricultural practices that improve the economic and environmental sustainability of the farm.
- The partnership has more than 220 working farms enrolled in 15 states.