

CLIMATE-SMART AGRICULTURAL INPUTS

Tools with the Power to Protect Our Environment



More & more scientific evidence shows us climate-smart agricultural tools can enable conservation practices.

SOME OF THESE TOOLS: Biotechnology, pesticides, biostimulants, precision agriculture technologies

WHAT THEY CAN DO: Sequester carbon, reduce tractor fuel use, minimize soil erosion, improve pollinator habitat

Policymakers can help by removing barriers and challenges to these tools so farmers can use them to improve environmental outcomes even more!

A 2017 study found that **pollinator habitat prepared with herbicides** resulted in **greater wildflower establishment** than preparations not using herbicides.*



A 2020 study found in one year's time **herbicide-tolerant corn and soybeans** in the U.S. and their companion herbicides enabled **reduced soil tillage** and **reduced tractor fuel use** to remove the equivalent of **4.2 million cars from roads**.*

A 2020 study found that precision agricultural equipment, such as GPS auto steer, **offered multiple environmental benefits**, including reducing the equivalent of **193,000 cars from roads annually**.*



A 2018 analysis found that herbicide-resistant weeds **reduced the ability of growers** to use no-till or conservation tillage, resulting in **reduced water quality** and **climate benefits**.*



These tools and the practices they enable face challenges. Herbicide-resistant weeds, geographical limitations, and limited research prevent these tools from reaching their full conservation potential.

* **Carbon sequestration:** *Environmental Impacts of Genetically Modified (GM) Crop Use 1996-2018: Impacts on Pesticide Use and Carbon Emissions.* 2020

* **Pollinator habitat:** *Pollinator Habitat Establishment after Organic and No-till Seedbed Preparation Methods.* 2017

* **Precision ag:** *Environmental Benefits of Precision Agriculture in the United States.* 2020

* **Herbicide resistance:** *Are Glyphosate-Resistant Weeds a Threat to Conservation Agriculture? Evidence from Tillage Practices in Soybean.* 2018

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Our Ask: We ask for help addressing the challenges facing climate-smart tools to allow the resulting conservation practices to reach their full potential.

Our Pledge: Agricultural producers will in turn be an even greater part of the climate solution.

Policy solutions should include:

Increasing research to address challenges facing inputs or the conservation practices they enable.



Maintaining or developing a predictable, **science and risk-based regulatory approach** for modern agricultural inputs.

Improving access to technical assistance so growers and others can optimize these tools while ensuring safe, responsible use that will **maximize environmental outcomes.**



Ensuring trade barriers established by **export markets do not impede domestic use of these tools** or the environmental benefits they can offer.

