



**The Challenge:** Farmers and ranchers are on the front lines as the climate changes. Warming affects crop seasons, soil nutrition, and erosion. Extreme weather such as droughts, heat waves, and floods can ruin crops. Land-use changes, production, livestock management, fertilizer use, and transportation increase carbon dioxide, methane, and nitrous oxide emissions.

**The Opportunity:** American farmers and ranchers are essential to putting safe, secure food on the table for families in the United States and around the world. By investing in new technologies, inventing new techniques, and identifying cost savings, farmers and ranchers have dramatically improved their efficiency. They are producing more crops with fewer inputs. Continued innovation can drive efficiency, increase output, reduce emissions, and maintain American and global leadership in agriculture.

**The Solutions:** To increase food supplies for American families, boost incomes for American farmers and ranchers, and improve the environment, Congress and the administration should:

- Leverage existing programs for farmers to purchase precision agriculture equipment.
- Expand opportunities for regenerative agriculture.
- Make immediate expensing permanently available.
- Maximize the efficiency of rural broadband spending.
- Identify goals, metrics, and assessment processes to measure the effectiveness of conservation programs.
- Reform permitting for invasive species plans to efficiently utilize federal spending for invasive species prevention, early detection systems, and eradication.
- Expand the use of incentives to reduce invasive species.
- Keep the labeling of genetically modified crops (GMs) voluntary.
- Codify product-based regulations for GMs and work with other countries to adopt an efficient international standard for GMs.
- Eliminate tariffs, tariff rate quotas, and countervailing duties on agricultural imports.

### **Key Facts:**

- The global food system represents 21 to 37 percent of annual emissions (as measured by 100-year Global Warming Potential).

- A 2018 [study found](#) that, “[i]nnovations in animal and crop genetics, chemicals, equipment, and farm organization have enabled continuing output growth while using much less labor and farmland. As a result, total agricultural output nearly tripled between 1948 and 2015—even as the amount of labor and land (two major inputs) used in farming declined by about 75 percent and 24 percent, respectively.”
- Studies show that precision agriculture adoption increased corn and soybean yields on existing lands and allowed farmers to avoid cultivating another 10.2 million acres of new cropland, the size of 4.5 Yellowstone National parks.
- A [June 2020 study](#) from PG Economics Ltd found that, in 2018, GM crops raised farm income nearly \$19 billion after having raised farm income \$225 billion from 1996-2018.
- The [same study](#) found that in 2018 the “combined GM crop-related carbon dioxide emission savings from reduced fuel use and additional soil carbon sequestration were equal to the removal from the roads of 15.3 million cars.”

## Legislation to Follow:

Legislation	Bill Number(s)	House Sponsor	Senate Sponsor	House Cosponsor(s)	Senate Cosponsor(s)
ALIGN Act	<a href="#">S.1166</a> and <a href="#">H.R.2558</a>	Arrington (R-TX-19)	Toomey (R-PA)	Nunes (R-CA-22), Buchanan (R-FL-16), Smith (R-NE-3), and more	Barrasso (R-WY), Blunt (R-MO), Braun (R-IN), and more
American Innovation and Competitiveness Act	<a href="#">H.R.1304</a>	Larson (D-CT-1)		Panetta (D-CA-20), DelBene (D-WA-1), Estes (R-KS-1), and more	
BIOCHAR Act	<a href="#">H.R.2581</a>	Herrel (R-NM-2)		Westerman (R-AR-4), Newhouse (R-WA-4), Gosar (R-AZ-4)	
Farmer Driven Conservation OUtcomes Act of 2020 (116th Congress)	<a href="#">S.3429</a> and <a href="#">H.R.6182</a>	Fudge (D-OH-11)	Casey (D-PA)	Thompson (R-PA-15), Pingree (D-ME-1), Delgado (D-NY-19), and more	Capito (R-WV)
No EMITS Act	<a href="#">H.R.2508</a>	Davis (R-IL-13)			
PRECISE Act	<a href="#">H.R.2518</a>	Hinson (R-IA-1)	Feenstra (R-IA-4), Miller-Meeks (R-IA-2), Fischbach (R-MN-7)		
The Open America's Waters Act	<a href="#">S.1646</a> and <a href="#">H.R.3205</a>	McClintock (R-CA-4)	Lee (R-UT)		
SUSTAINS Act	<a href="#">H.R.2606</a>	Thompson (R-PA-15)		Feenstra (R-IA-4), Johnson (R-SD-At Large), Baird (R-IN-4), and more	