

## Growing Climate Solutions Act

### Issue Background

---

BIO supports the Growing Climate Solutions Act (GCSA) (S.3894/H.R. 7393) introduced by Senators Mike Braun (R-IN) and Debbie Stabenow (D-MI) and Representatives Abigail Spanberger (D-VA) and Don Bacon (R-NE). This bill will support America's farmers, ranchers, and foresters who want to adopt innovative practices that combat climate change, while continuing to provide the world with food, feed, and fiber.

BIO members are developing biology-based tools to enable American agricultural producers to be part of the solution to reducing greenhouse gas emissions and adapt to the challenges posed by climate change. GCSA will foster acceptance for new technologies that can further reduce the environmental impact of agriculture, including tools like genomic engineering of plants and enhancing animal feed with enzymes and other additives to reduce emissions in livestock.

Combined with modern agricultural techniques and sustainable farming practices such as planting cover crops and no-till, these innovative technologies that enhance productivity can play a key role in sequestering carbon dioxide (CO<sub>2</sub>) in the soil, improving soil health, and protecting America's waterways.

This bill will foster sustainability and economic resiliency in agriculture and preserve America's rich environmental diversity.

### Policy Position

---

GCSA will make it easier for farmers, ranchers, and foresters to voluntarily deploy their land in the fight against climate change by solving the technical entry barriers to carbon markets. By ensuring producers have access to, and can benefit from a carbon market this legislation will:

- **Provide producers support for securing an additional income stream** and make them financially more resilient to future disruptions like COVID-19 or low commodity prices.
- **Provide certainty that emissions reductions from soil carbon sequestration are real and verifiable.** The certification program will draw on the expertise of USDA and outside experts to ensure that the CO<sub>2</sub> savings are real and permanent.
- **Encourage producers to use modern biological approaches to improve soil health**, including through precision plant breeding, biostimulants, and microbial inoculants.
  - Improved agricultural practices increase crop yields and provide several environmental benefits including capturing nitrogen directly from the atmosphere and increasing root growth that binds carbon to the soil.
- **Bring greater value to sustainable fuels, biobased products, and food and feed applications.**
  - Not only are these markets important to farmers, but also to the producers of sustainable fuels, biobased products, food, animal feed, and the other innumerable products of biotechnology that Americans rely on every day.
  - The GCSA will allow the manufacturers of biobased chemicals, plastics, food, animal feed, and everyday materials to reliably demonstrate their true environmental benefit, from farm to consumer.
- **Foster acceptance for new technologies like gene editing** plants to be adaptive to a changing climate and feed additives for livestock, which have demonstrated the ability to reduce methane emissions by up to 30 percent.
- **Reward practices that protect waterways, increase biodiversity, and prevent soil erosion.**

### Key Points

---

- ✓ In 2014, the U.S. land carbon sink sequestered nearly 0.8 Gt of CO<sub>2</sub> offsetting 11 percent of economy-wide GHG emissions.
- ✓ Maintaining and enhancing the land carbon sink beyond today's levels could offset up to 45 percent of economy wide emissions in 2050.
- ✓ The science is clear, agriculture can contribute to significant emissions reductions in agriculture and draw CO<sub>2</sub> concentrations in the atmosphere.
- ✓ This bill does not establish a government price on carbon, is not carbon tax, and does not require mandatory participation.