



**SfL Side Event for IICA  
Sustainable Agriculture of the Americas Pavilion  
COP 27  
Thursday, November 10, 2022  
19:00-20:30**

**Organizer:** Solutions from the Land

**Title:** Agriculture's Role in Decarbonizing the Economy and Reducing GHG Emissions

**Event/Exhibit Description:**

While electrification of the transport and power sectors will provide significant reductions in carbon and other GHG emissions, Climate Smart agricultural production systems and practices, enabled by innovation and technology along with emerging carbon markets, can deliver supplemental solutions in the form of soil carbon sequestration and replacing carbon intensive fuels with renewable liquid fuels and renewable natural gas. This session will outline producer and value chain partner perspectives on what is needed to scale bioenergy and nature-based solutions in support of the successful attainment of ambitious national and global GHG reduction goals.

**Event/Exhibit Significance:**

Science has confirmed that the global climate is changing and warming because of increased concentrations of carbon dioxide and other greenhouse gases in the Earth's atmosphere. Farmers, ranchers, fishers and foresters are on the frontlines of the climate crisis and agriculture is one of sectors most impacted by the many faces of climate change: drought, excessive precipitation, extreme weather events, invasive species and pests, higher nighttime temperatures and false springs to name a few.

While the impacts of climate change on agriculture are well known and growing, the agriculture sector's role in mitigating climate impacts has not been fully appreciated or adequately enabled in global policy, programs, investments and partnerships. Fortunately, awareness and understanding of the ag sector's role as a climate change solution pathway is improving and platforms like the UNFCCC Koronivia Joint Work on Agriculture, the Agriculture Innovation Mission for Climate (AIM4C) and the Sustainable Productivity Growth (SPG) initiatives are spotlighting how working lands can be managed to deliver high value mitigation solutions. With an eye towards the future, agriculture is now positioned to respond to these challenges using Climate Smart agriculture systems that sustainably intensify production, improve resilience and concurrently reduce and or sequester GHG emission. The good news is that not only can farms produce high quality and nutrient dense commodities, but they can also simultaneously provide

high value agroecosystem services that filter and store water, improve air quality, enhance biodiversity, sequester carbon and reduce greenhouse gas emissions, nurture wildlife while underpinning vibrant local economies and communities.

### **Panel**

**Moderator-** Fred Yoder, Ohio farmer, Solutions from the Land co-chair, North American Climate Smart Agriculture Alliance

### **Farmer/producer panel**

- Bryan Sievers, Iowa, USA- grain and livestock farmer; Co-Chair Iowa Smart Agriculture and Vice Chair American Biogas Council
- Doug Berven, Sioux Falls, SD Vice President for Corporate Affairs, POET
- Evandro Gussi, president and CEO of the Brazilian Sugarcane Industry Association (UNICA)
- Verity Ulibarri AVVA Farms, New Mexico, USA- diversified livestock-cropping systems

Proposed questions:

1. How can producers be rewarded not just for producing commodities, but for the water they filter and store, the carbon they sequester, the biodiversity and wildlife habitat they enhance, the economic growth and local wealth they generate and the improved of life they produce?
2. How can we expand and accelerate farmer-to farmer experimentation and knowledge sharing on climate mitigation solutions they can deliver?
3. What changes are needed in policy, research, markets and finance flows to unlock the full potential for agriculture to deliver GHG reduction services?

### **Proposed Format**

This 90-minute side event will feature presentations by 5 farmers and value chain partners who will share their experiences in utilizing climate smart agriculture systems and practices that provide high value, near term and scalable solutions to the co-joined mega-challenges the world faces today.

### **Themes**

Food security and nutrition, climate change, ecosystem services, water quality, improved livelihoods, health and wellbeing

### **Key Words**

Bioeconomy, circular agricultural systems, agroecology, agriculture, food systems, farmers,

biodiversity, complexity, mixed species systems, multi-benefit production, technologies, innovation.

**Focal Points**

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