# Innovating a New Future for **Anaerobic Digestion**

2023-24 Grass to Gas Webinar Series



**Join us** for monthly webinars on the emerging science that sits at the juncture of Renewable Natural Gas, Anaerobic Digestion, and Regenerative Agriculture.

**Learn** from thought leaders who are expanding what is known about transforming our agricultural sector in terms of its energy, economic, and ecological performance.

**Engage** in discussion about new discoveries about integrating biogas and regenerative agriculture together into the rural economy.





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#### Who Should Attend?

All are welcome! These webinars will be presenting new and emerging research in an engaging manner that is relevant to farms and agricultural communities. As such, they are especially appropriate for farmers, students, researchers, ag professionals, and others who are interested in anaerobic digestion and envisioning new approaches to farming, energy, and the ecosystem.

#### **Schedule:**

17 October, 2023, 12n Eastern / 11am Central:

C-CHANGE Grass2Gas: Transdisciplinary engagement toward creating a new biobased value chain from perennial and winter crops. Lisa Schulte-Moore, Iowa State University

14 November, 1pm Eastern / 12n Central:

New Targets, Sustainable Markets: Reimagining Anaerobic Digestion for the Future Tom Richard, Penn State University

12 December, 1pm Eastern / 12n Central:

Emerging strategies for increasing the profitability of mixed feedstock anaerobic digesters. Mark Mba-Wright, Iowa State

16 January, 1pm Eastern / 12n Central:

Life Cycle Analysis of Biomass to Biogas: taking a look at the bigger picture.

Chris Costello, Penn State

20 February, 1pm Eastern / 12n Central:

Exploring the Policy Landscape for Livestock Anaerobic Digesters Michael Helbing and Ekram Korkut, Penn State and Iowa State University

20 March, 1pm Eastern / 12n Central:

Managing Digestate for Crop Production, Reduced Production Costs and Losses to the Environment. Heather Karsten, Penn State

16 April, 1pm Eastern / 12n Central:

Grassland ecosystem impacts: making perennial grass to gas a strategy for regenerative farms. Matt Helmers, Iowa State University

### **Register:**

Attendance is free, but you must register in advance to obtain a log-in code. Us the Q-R code above or go to https://extension.psu.edu/catalogsearch/result/?g=C-Change+Grass2Gas









## **Speakers and Topics**

This webinar series features selected research leaders of the C-CHANGE Grass to Gas project – they will be sharing findings related to their research on anaerobic digestion, renewable natural gas, and regenerative agriculture



October 17: Lisa Schulte Moore,
Professor, Natural Resource Ecology and
Mgmt. Iowa State University
This webinar will introduce the CCHANGE project goals, team, and
provide a high-level summary of initial
findings to introduce this winter webinar
series.



Feb 20: Michael Helbing, Ekram Korkut, Penn State and Iowa State Universities This webinar will summarize recent research on governmental policy in the USA regarding anaerobic digestion, including state-level variations, trends, and how the policy landscape may impact the viability of farm-based anaerobic digestion.



**November 14 Speaker**, Tom Richard, Professor Emeritus, Penn State This webinar will discuss the role of RNG in hard to decarbonize sectors of the economy, including sustainable aviation fuel, dispatchable electricity, renewable hydrogen, and the chemical industry.



March 20: Heather Karsten, Associate Professor, Plant Sciences, Penn State Digesters aren't only about animals and energy – they can have a profound impact on cropping systems and the nutrient dynamics of our agricultural sector. Join this webinar to learn about new findings in this important area.



December 12: Mark Mba-Wright,
Associate Professor, Mechanical
Engineering. Iowa State University
This webinar will explore new
opportunities for improving the
performance and profitability of
anaerobic digesters, based on new
research findings coming out of the CCHANGE grass to gas program.



April 16: Matt Helmers, Professor,
Agricultural and Biological Engineering,
Iowa State University.
Grasslands can produce feedstock for
Biogas production, but how can they
play in improving the ecosystem of a
farm? This seminar will present recent
findings relating to perennial grasses and
their environmental performance.



**January 16: Christine Costello**, Associate Professor, Ag & Biol Engineering. Penn State

More renewable natural gas sounds like a good idea, but are there unexpected consequences we need to keep in mind? Join this webinar to learn about the "big picture" implications of the expanding RNG sector in the United States.



Questions? Contact Matt Svetz (<u>mcs5753@psu.edu</u>) or Daniel Ciolkosz (<u>dec109@psu.edu</u>).

This webinar series is part of a regional collaborative project supported by the USDA-NIFA, Award No. 2020-68012-31824, Consortium for Cultivating Human And Naturally reGenerative Enterprises. The webinars are hosted by Penn State Extension in partnership with Iowa State University and Iowa Learning Farms.



