# Penn State Biomass Energy Short Course Series

#### When: June 8-9, 2022

Where: Lancaster Farm and Home Center, 1383 Arcadia Rd, Lancaster PA 17601

Hosted by Penn State Extension, the Penn State Center for Biorenewables, and the C-Change Grass2Gas Consortium.

#### **Overview:**

Dramatic changes to the technology, markets, and incentives for renewable methane are causing new opportunities to emerge for biogas production to be utilized as "Renewable Natural Gas".

What are the foundational principles guiding this rapidly expanding sector? What are the emerging business models? What new technologies are shifting the way we think about feedstocks, scale, and productivity? Join us as we explore these and other important questions regarding renewable natural gas opportunities.

The event will include two days of presentations, panel discussions, a site tour, and networking opportunities. Day 1 will focus on biogas principles and science, while Day 2 will turn its attention to technology and business aspects.

## Who Should Attend?

This workshop is designed for individuals seeking to explore upcoming opportunities for biogas and renewable natural gas (RNG) opportunities in the region. Bioenergy and natural gas professionals, project developers, policy makers, financiers, researchers, and public sector professionals are all encouraged to attend.

### Speakers:

Presenters and panelists for this short course include leading scientists and industry professionals in the RNG space, Including:

- Tom Richard, Penn State
- Dan Tyndall, Roeslein Alternative Energy
- Amro Hassenein, University of Maryland
- Heather Karsten, Penn State
- Kurt Miller, Venture Engineering
- Jeff Bonar, CapCO2
- Behrang Mansoorejad, Xebec
- Luca Sirugo, Gruppo EF
- William Sapon, Peoples Natural Gas
- Hassan Loutfi, Roeslein Alternative Energy

#### Program:

Day 1: June 8

13:00	Registration open
13:30	Biogas Principles and Properties
14:15	Feedstocks for Biogas
14:45	Microbial Community Care for Biogas
15:30	Ecosystem services and impacts
16:00	Digester Facility Tour Farm
18:00	Reception and Informal Discussion

#### Day 2: June 9

8:30	Welcome
8:45	Biogas Production Systems
9:30	RNG Project Development
10:15	Break
10:45	Panel: Emerging Opportunities in Biogas
12:00	Lunch
13:00	Biogas Upgrading
13:45	Integrating RNG into the Natural Gas Infrastructure
14:30	Break
14:45	RNG Market Essentials
15:30	Future Outlook for Biogas as Biorefining
16:15	Summary and Closing Comments
16:30	Close

### Cost and Registration:

Early bird registration (before May 15) is \$195. After that it rises to \$245. Register online at:

https://web.cvent.com/event/27db62b8-b8ca-48ad-8945-4dc0f03596fb/summary

Commercial display space also available – contact us at the numbers below for details.

# Questions?

Please contact:

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