## NECC 2001 "Sustainable Farm Energy Production and Use" Regional Project Group Annual Meeting 2023

LOCATION: Rutgers EcoComplex, 1200 Florence Columbus Rd., Bordentown, NJ 08505

Date: October 23 - 24, 2023

Number of people in attendance: 32 in person (See attached list), 20 virtually (via Zoom)

The 2023 Annual Meeting of the NECC 2001 "Sustainable Farm Energy Production and Use Workgroup" was hosted in New Jersey by Rutgers University. In addition to the Annual Business meeting, two informational sessions and two tours were conducted that focused on Agrivoltaics. The following is a brief summary of the event.

10/23 9:00 – 12:30 Tour of the Snyder Research Farm's Agrivoltaics R&D System

A virtual tour of the farm was provided in the conference room by the Farm Director, Peter Nitzsche. A.J. Both also gave a presentation on the plans for the remote environmental data collection equipment being used in the agrivoltaics arrays and control blocks. Then a wagon ride was provided out to the agrivoltaics system, and an explanation of the system was provided by Peter Nitzsche and David Specca (Rutgers Agrivoltaics Program Lead).

#### 10/23 1:15 – 3:45 General Session 1

After a Buffet Luncheon provided by the NJ Ag Experiment Station, welcoming remarks from NJAES Associate Director for Economic Development, Peggy Brennan Tonetta, were provided and an introduction to the Rutgers EcoComplex was provided by Serpil Guran, EcoComplex Director.

Next were presentations from Agrivoltaics stakeholders. American Farmland Trust's Ethan Winter gave a presentation on their "National Solar Energy Program". Zach Goff-Eldredge, DOE, and Ethan Schoolman, PI for Rutgers FARMS grant, presented on the DOE FARMS Program on the National and Rutgers level. Dave Specca, Rutgers Agrivoltaics Program Lead, presented information on the NJ Dual Use Solar Energy Pilot Program.

The session then shifted to presentations by Technology Providers including:

- Advanced Solar Products Lyle Rawlings
- BlueWave Jesse Robertson-DuBois
- Lightstar Owen Deitcher
- Next2Sun Lucas Pendola
- SolAg Iain Ward
- Sun Agri Chuck Schwartz

#### 10/23 4:00 – 5:45 NECC Annual Business Meeting

There were 6 member and one guest participating in the meeting. Charles Gould (MI), John Ignosh (VT), A.J. Both (Rutgers), and David Specca (Rutgers) attended in-person. Dan Ciolkosz (Penn State) and Xiusheng Yang (CT) attended virtually. The in-person guest was Zach Goldberg. Station reports were provided for Michigan State, Virginia Tech, Penn State, and Rutgers.

The Accomplishments and Publications for these Universities are attached to the report.

10/23 6:45 – 9:00 Group Dinner at O'Connor's Restaurant

Rutgers reserved a separate dining room within the restaurant. This allowed for a good atmosphere to network with new acquaintances and catch up with old colleagues.

10/24 9:00 – 11:00 General Session 2

This session was designed to be an interactive session and started off with some additional information regarding shade modelling work being done as part of the Rutgers Agrivoltaics Program presented by Dunbar Birnie. Sarah Beebout, USDA/ARS-ESRI provided a presentation on sustainable energy research projects at the USDA as well as a look forward with upcoming research thrusts.

A group discussion to explore potential future collaborations followed the presentations. There was a strong level of interest in interstate collaborations, especially regarding agrivoltaics research, demonstration, and outreach.

10/24 12:00 – 2:00 – Tour of the Rutgers Agricultural Research and Extension Center (RAREC)

Lunch was provided by the Experiment Station administration at the Research Farm. This provided an opportunity for more networking among the participants. RAREC has the largest agrivoltaics system of the three research farms wit 250 kW DC installed. All are single axis tracking systems with a hub height of 8 feet. Dan Ward, RAREC Center Director and Rutgers Agrivoltaics Program member provided the field tour. Everyone was allowed to observe the field from the edge because the winter cover crop was just planted and they didn't want it to be trampled. There were lots of questions for Dan from the group.

In closing, the organizers received many compliments on the general content of the program and it's help to better understand the opportunities and challenges of agrivoltaics in the northeast US.

Respectfully submitted,

David Specca, 2023 NECC 2001 Co-chair, Project Lead – Rutgers Agrivoltaics Program

NECC 2001 Attendees (OCT 2023 Meeting)		
Name	Affiliation	Email Address
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LOCATION: Rutgers EcoComplex, 1200 Florence Columbus Rd., Bordentown, NJ 08505

#### **AGENDA**

Monday, October 23

- For nearby overnighters: 8:45 Meet at the EcoComplex for a light breakfast
- 9:00 Depart the EcoComplex in vans for first farm tour
- 10:00 Arrive at the Snyder Research Farm, 140 Locust Grove Rd., Pittstown, NJ 08867 <a href="https://snyderfarm.rutgers.edu/">https://snyderfarm.rutgers.edu/</a>

Point of interest: Agrivoltaics, single-axis trackers designed for hay production

- 10:00 10:20 Introduction about the farm Peter Nitzsche coffee & doughnuts (Provided by Advanced Solar Products)
- 10:20 10:35 Environmental Data Collection and Recording Equipment A.J. Both
- 10:35 -11:30 Board the hay wagon and visit agrivoltaics site
- 11:30 Return to the EcoComplex by van
- 12:30 Arrive at the EcoComplex
- 12:30 1:15 Buffet lunch
- 1:15 3:45 **Session 1**

Stakeholder presentations in auditorium – in person and via Zoom

- Welcoming Remarks from NJAES
- o Introduction to the Rutgers EcoComplex Serpil Guran
- o American Farmland Trust "National Solar Energy Program" Ethan Winter; Presentation LINK
- O DOE FARMS Program on the National and Rutgers level Zach Goff-Eldredge, DOE and Ethan Schoolman, PI for Rutgers FARMS grant; Presentation LINK
- o Update on NJ Dual Use Solar Energy Pilot Program Dave Specca
- o Technology Providers (10-minute slots)
  - Advanced Solar Products Lyle Rawlings; Presentation LINK
  - BlueWave Jesse Robertson-DuBois; Presentation LINK
  - Lightstar Owen Deitcher; Presentation LINK
  - Next2Sun Lucas Pendola;
  - SolAg Iain Ward;
  - Sun Agri Chuck Schwartz; Presentation LINK
- 3:45 Short Break
- 4:00 5:45 NECC Annual Business Meeting
  - Report from Administrative Advisor
  - o 4:15 5:45 Station Reports/Discussion in person and via Zoom
  - o Michigan State University
  - o Penn State University Presentation LINK
  - o Virginia Tech Presentation LINK
- 6:45 Group Dinner (meal cost covered by you)
  - o O'Connor's Restaurant, 1383 Monmouth Rd, Eastampton, NJ 08060 www.oconnorsmtholly.com

# NECC 2001 "Sustainable Farm Energy Production and Use" Regional Project Group Annual Meeting 2023

Tuesday, October 24

- For nearby overnighters: 8:30 Meet at the EcoComplex for a light breakfast
- 9:00 11:00 **Session 2**

Stakeholder meeting in auditorium – in person and via Zoom

- o Vertical Bifacial system at the Rutgers Animal Farm Dunbar Birnie; Presentation LINK
- o USDA/ARS Sarah Beebout Presentation LINK
- o Group discussion for exploration of potential future collaborations
- Open invitation for Workgroup members to present on their energy projects
- 11:00 Depart the EcoComplex in vans for the second farm tour
- 12:00 Arrive at the Rutgers Agricultural Research and Extension Center (RAREC)
  121 Northville Rd., Bridgeton, NJ 08302-5919
  https://njaes.rutgers.edu/centers/rarec/
- 12:00-12:30 Lunch at RAREC
- 12:30 Site Tour

Point of interest: Agrivoltaics, single and double-wide single-axis trackers for grain crops and vegetable trials

- 2:00 Depart for the EcoComplex
- 3:00 Arrive at the EcoComplex
- 3:15 Meeting adjourned

### **CONTACT INFORMATION:**

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